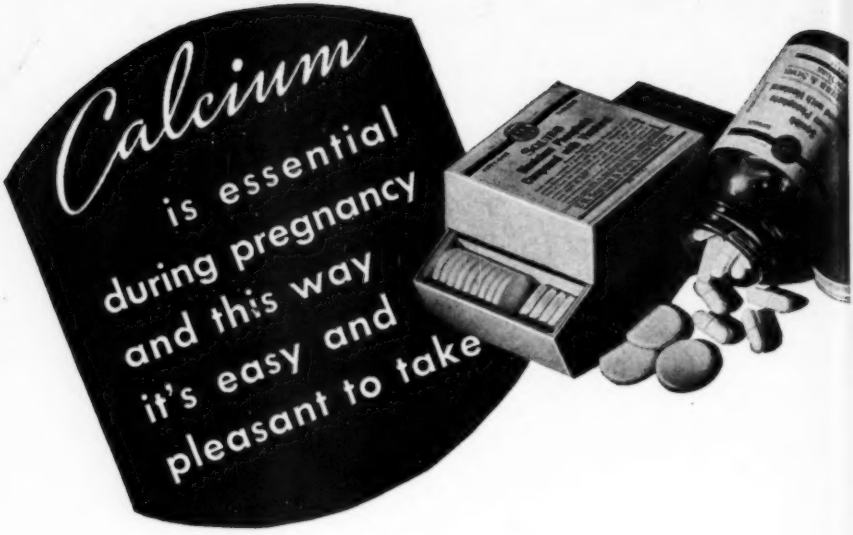
Medical Times

Vol. 65 OCTOBER, 1937 No. 10



THE NEED for adequate calcium in the diet is well recognized. Attention to this is particularly necessary during pregnancy. The mother's need for calcium during this period is greatly increased, for, in addition to her own requirements, she must support the demands of the fetus for this element.

To insure a regular and adequate intake of calcium, phosphorus and sufficient Vitamin D to provide for the absorption and utilization of these minerals, many physicians recommend Dicalcium Phosphate Compound with Viosterol Squibb. It is supplied in both tablet and capsule form.

One pleasant-flavored tablet, or two capsules contain 9 grains dicalcium phosphate, 6 grains calcium gluconate and 660 U.S.P. XI units of Vitamin D. The capsules are useful as a change from tablets and during pregnancy when nausea tends to restrict normal food intake. Tablets are available in boxes of 51; capsules in bottles of 100.

For literature address the Professional Service Dept., 745 Fifth Ave., New York.

E·R·SQUIBB & SONS, NEW YORK
MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858

Dicalcium Phosphate Compound *with* Viosterol Squibb TABLETS · CAPSULES

Editorials

GEORGE H. SIMMONS, M.D.
1852—1937

THE career of Dr. Simmons as Editor of the *Journal of the American Medical Association* set the highest standards and realized the greatest achievements for medical journalism from 1899 onward. The reorganized Association and its many publications, Councils and Departments are monuments to his great abilities not excelled in significance, in our view, by any other expression of medicine anywhere in the modern world. It would have been impossible, during his lifetime, to honor such a man too much. To do justice to him dead, only the gifts of a Plutarch would suffice.

"The Group Health Association"

A CURIOUS philosophy is coming to control thought and action in these days. Instead of trying to define it we shall give three illustrations, one of them medical, of how this philosophy works. The Government, with the approval of the Supreme Court, repudiated the gold clause whereby it was bound to pay for Liberty and other bonds in gold, on the ground that unless the power of Congress to fix the value of the dollar was upheld, there might come a time when the power of the Government would be powerless to change its money standard no matter how necessary it might be to do so. Since the bonds called for payment in dollars, that would have to satisfy everybody concerned. Another illustration of this philosophy is to be found in the view that the "right to work", recently so much emphasized in the course of labor disputes, is only "a glittering phrase, invoked to defeat industrial democracy, without which democracy must perish." Any truth, or any fact, can thus today be discredited and thrown into the ash can, if thereby the purpose of a controlling faction is served. Our medical illustration of this cynical philosophy is furnished by the institution in Washington of the entering wedge of a comprehensive health insurance project under the guise of an experiment comparable to various group health plans in private industry. A medical bureaucracy is actually in process of being set up in Washington under the auspices of the Social Security Board. Note, however, that in accordance with the philosophy now in vogue, the scheme is declared to have not the remotest resemblance to socialized medicine, or compulsory health insurance.

Under the directorship of Dr. Henry R. Brown of the tuberculosis division of the Veterans Administration, a service is being put into effect which will provide medical and surgical examinations, including eye examinations, laboratory tests and x-ray examinations. Complete medical and surgical care will be given. This service is being offered to the employees of the Home Loan Corporation and calls for payments of $3.30 a month for men with families and $2.20 a month for single persons. Hospitalization is to be given in a semi-private room for a period of three weeks during a single illness, without additional charge.

Just bear in mind that the charter of this organization ("The Group Health Association") is not restricted to the employees of the Federal Home Loan Bank Board and Home Owners Loan Corporation, but can be extended to all Government employees throughout the country. The scheme dovetails with recent intimations that the Social Security Board is studying the possibility of adding a national health insurance project to its program, the cost to be borne by taxpayers and to involve a 5 per cent payroll deduction. The philosophy of the Social Security Board holds that since the board has authority to do research

work on subjects related to social security, it can experiment in the manner which we have described, since health insurance is one of these "related subjects."

There is a powerful Washington group steering straight for medical care on the "quantity production" basis. Applied at first cautiously, with its true nature denied, this inferior type of care may be expected to take in, after a while, the 117,000 Federal employees in Washington, and ultimately the 700,000 Government employees throughout the country.

Consider the job possibilities in such a medical bureaucracy. A vast machine looms up, with political implications of terrifying nature, not to speak of the economic angle.

In the press of August 26 it was seriously asserted by responsible journalists that just as an effort has been made to undermine the American Bar Association, so a similar effort may be looked for with respect to the American Medical Association, since these organizations maintain legal, economic and health standards that must be broken down if socialized medicine is to triumph.

The caliber of the men at whose mercy we stand has been ironically revealed by the recent antics of Senator Jim Ham Lewis, Chairman of the Social Security outfit in Congress (see our Special Article in the September issue of the MEDICAL TIMES). Most practitioners of medicine, not being interested in the Lewis brand of politics, have not had an opportunity, until now, to confirm the verdict rendered upon Jim Ham many years ago by Speaker Tom Reed of Maine. Reed described him as "a garrulous rainbow." It is in the hands of men such as this that the destiny of the great science and art of medicine seems to rest at the present juncture.

Hospital for Incurables

JONATHAN SWIFT, in 1733, was greatly concerned about a hospital for incurables. "There is not anything which contributes more to the reputation of particular persons, or to honors of a nation in general, than erecting and endowing proper edifices for the reception of those who labour under different kinds of distress."

Among the incurables for such an institution, Swift includes incurable fools, incurable knaves, incurable scolds, incurable scribblers, incurable coxcombs, incurable infidels, incurable liars, incurable whores, incurably vain, incurably envious, incurably proud, incurably affected, incurably impertinent, and ten thousand other incurables.

"And, without doubt, every unprejudiced person will agree, that, out of mere Christian charity, the public ought to be eased as much as possible of this troublesome and intolerable variety of incurables."

M. W. T.

✚

Psychology and Revolution

WHAT dawned instinctively upon many people in the early days of the Freudian doctrine is now being diagrammed by intellectual leaders, namely, that it parallelled the ideas of Karl Marx at many points and held the same implications. In other words, it was subversive of the capitalist order. This, no doubt, influenced the hostile reaction to it in the earlier days, when the social order was much stronger in its anchorages.

Freud and Marx supplement each other and are mutually corroborative, according to Reuben Osborn *(Freud and Marx*, New York, Equinox Cooperative Press). Toward this judgment George Soule, noted American economist, takes a sympathetic attitude. The Marxian system does take into account the nature of the individual personality and what influences its behavior, and the Freudian system does reckon with the impingement of social forces upon individuals. Osborn fits the two theories together very convincingly.

Freud seeks to set men free "by the development of a conscious, rational ego, an organized personality competent to deal with reality and irrational authority." But man is reluctant to act in a rational manner, indeed, the human personality is often destroyed through repression and withdrawal from reality.

The goal of Marx is diminution of the power of irrational authority. Here the parallelism becomes clear. "External irrational forces and irrational internal ones must be weakened."

Technically, "the [Freudian] super-ego, a survival of parental authority, is the part of the individual mind which sets up irrational government over the rest of the personality." Now taking the Marxian point of view, "authority, the capitalist state and conservative tradition are the social super-ego; the struggle against them when they maintain a social order which is incapable of satisfying instinctual demands is like the individual struggle of the ego against the super-ego in behalf of emotional drives. The struggle may be resolved by a revolution which abolishes the social super-ego and enables man to be master of himself and to create a rational society. This revolution is a therapeutic measure, and psychoanalysts should be partisans of the class-conscious workers."

We should say that intellectual acceptance of the Freudian theory definitely implies intellectual acceptance of Marxism, or vice versa.

Osborn has performed a useful service in correlating so suggestively these two great systems of thought. In the light of his work, one may better gauge the reason for and the intensity of the resistance to the Freudian theory in its various stages since the first promulgation.

Alcohol Reappraised

PROFESSOR Haven Emerson of Columbia University admits that "human stock has probably not been injured or adversely affected by the long use of alcohol." We presume that the alcoholic is one whose habit results from defects of the mind and nervous system attributable to other factors; the alcohol furnishes an assuagement.

Alcohol is the cause of acute and chronic illnesses and of about twice as many deaths as are attributed to it. "It complicates the management of many forms of infection, accident and operative procedure, and its regular use shortens the expectancy of life in proportion to the amount used. About ten per cent of all new admissions to mental hospitals are for alcoholic psychoses."

Drinking which is "well within the limits of ordinary social use" usually results in "impairment of reason, weakening of will, of self-control and judgment, and loss of physical skill and endurance."

About the only good word that Professor Emerson has for alcohol is that it may furnish "comfort and relief from the boredom and futility of life in the aged." All the authorities seem to be agreed on that one point.

Professor Emerson says that if alcohol is used at all it should be only by persons of sound nervous systems. But persons of sound nervous systems have no more use for it than they have for any other potent drug. They don't need it for any purpose.

Upon the whole, Professor Emerson understates the case against alcohol. His indictment seems a little more than fair and to that extent unscientific. But we are, in general, in sympathy with his point of view.

From the therapeutic angle, Durfee has been remarkably successful in the rehabilitation of alcoholics on his Rhode Island farm. His enlightened methods are described in his book, recently published, "To Drink Or Not To Drink."

✚

The Forty-Year Deadline

VETERANS of the First World War who are now in the forties, as well as civilians in the same category, often charge their inability to secure re-employment today, when out of jobs, to a feeling on the part of employers that the war generations were ruined by the great holocaust, the soldiers by mental and physical ravages, the civilians by the false industrial, economic and psychologic factors incident to "the great madness." The real truth of the matter has much more to do with the higher cost of group insurance for these classes of men; remedies are being proposed for this situation, one of which is the payment of the difference in premium by the affected individuals, and another a Federal or State payroll tax, "graduated according to ages of employees in such a

way as to debit those under a certain age and to credit those over it."

However, in so far as anti-social prejudices are chargeable to the war factor, another reason is made available to present youth why it should consider the remote social costs to it of a Second World War—or of any war at all.

HUMAN AUTONOMIC PHARMACOLOGY

WILLIAM DAMESHEK and OSCAR FEINSILVER, Boston (*Journal A. M. A.*, Aug. 21, 1937), have recently observed five cases with brief psychotic episodes following administrations of from three to six drops of a medication prescribed for mydriasis. In the first patient although the diagnosis of atropine poisoning with psychosis was finally considered, it was at first thought that the patient might have dementia praecox or an acute manic-depressive episode. The use of acetyl - beta-methyl choline chloride (mecholyl, Merck), suggested itself as a diagnostic test for possible atropinism. Thus, the complete absence of the characteristic mecholyl effects (sweating, rhinorrhea, salivation, lacrimation) when the drug was given in a dosage of 20 mg. served to confirm the final clinical impression of atropinism. When the patient's psychosis had subsided, reinjection of mecholyl was followed by the typical effects of the drug. Within a relatively short period after this first patient was studied, four other cases with the same type of psychosis appeared at the hospital. The same tests performed in these cases gave similar results. The authors feel that the data obtained in these cases are sufficiently important from both diagnostic and prognostic standpoints to warrant reporting. It was later discovered that the drug responsible for these unusual psychotic episodes following administration into the conjunctival sac was neither homatropine nor atropine but scopolamine, one of the atropine series.

2500 HOURS IN BED

Probably more than a fourth of the average human being's life is spent in bed for the purpose of sleep—but sleep does not always come readily. To a marked degree scientists, and particularly neurologists, have been turning their attention to the portion of the 2500 hours per year thus spent which are consumed not in healthful repose but in wakefulness which ranges from the irritating to the harrowing stages.

Four years ago scientists in the General Electric research laboratory at Schenectady embarked on a thorough study of bedroom sleeping conditions, to which so great a portion of an average life is subject. Air conditioning in every phase was examined, including sleeping hoods which furnished purified, vitalized air direct to the sleeper. Among the by-products which emerged from this study was an electric comforter, designed to afford safe, automatically controlled warmth to a sleeping individual without the necessity of heaped-up blankets or insufficient fresh air. The comforter was made up in sample lots and distributed in certain areas last year, following which a user survey was made. On the basis of results the comforter has now been redesigned for general use.

PREVENTIVE MEDICINE IN *Otolaryngology*

ARTHUR PALMER, M.D., F.A.C.S.
New York, N. Y.

INTEREST in the principles of health, hygiene and preventive medicine is steadily increasing and many individuals are making an earnest effort to benefit by the application of these principles. The altruistic aims of members of the medical profession, especially those engaged in teaching and practicing public health, account for this awakening. A course of lectures on preventive medicine in medical schools is an indication of the trend in medical education. We no longer are satisfied to teach medical students how to cure diseases; they must know how to prevent diseases. We even go so far as to take the patients into our confidence in these matters. "Non solum nobis" is the watch word. Knowledge of the art of keeping well is no longer the sole possession of the medical profession but of the world at large. No subject is so intricate but that it may be simplified and made fit for popular absorption. In recent years the use of the radio by qualified physicians speaking with the authority of organized medical societies has proven a great aid in the dissemination of medical knowledge. Keeping in mind practical needs and purposes the hygienist seeks to warn the individual against the enemies of the body and show him how to avoid or destroy them and how to strengthen his powers of resistance if contact is unavoidable.

From the point of view of preventive medicine the impairment of hearing and the common cold are of prime importance in the field of otolaryngology. Millions of persons in this country alone suffer from one or both of these conditions. To a lesser degree the otolaryngologist is concerned with the prevention of ingestion and inhalation of foreign bodies or harmful chemicals into food and air passages, the prevention of nasal deformities, of tuberculosis, of syphilis of the nose or larynx and of acute and chronic attacks of rhinitis due to the presence of an irritant in allergic individuals. To this list might be added other less important diseases of the ear, nose and throat, which, to a degree at least, may be prevented by the institution of proper measures. Work in the prevention of diphtheria has most energetically and successfully been carried out by the department of public health, pediatricians and general practitioners.

From the Department of Surgery, New York Hospital—Cornell Medical College Association.

Impairment of Hearing

THE problem of deafness is occupying the attention of the medical profession and the public to an ever-increasing degree. The handicap of deafness in young children is hardly second to that of blindness and the problem of preventing deafness properly begins in early childhood. During the last decade there have been established clinics for the prevention of deafness in a number of the larger cities in this country. The League for the Hard of Hearing, with branches in most of the principal cities, has done much to foster this work and to educate the public in preventive measures. Based partly on the results of audiometric tests with the manifold audiometer, it has been established by Shambaugh of Chicago that there are 3,000,000 children who have some loss of hearing, in this country alone. There are probably 6,000,000 individuals in the United States suffering from impaired hearing.

We shall not discuss the problem of congenital deafness or deaf-mutism ex-

cept to state that the education of these children should be carried out in special institutions by teachers specially trained in this field. It is inadvisable for two deaf mutes to marry.

Acquired deafness may be the result of repeated head colds, of sinusitis, or of influenza; or it may be secondary to the presence of adenoids, diseased tonsils, or nasal obstruction due to a deviated septum or polyps. Again it may follow the common contagious diseases of childhood or intestinal toxemia. The severest type of deafness is associated with cerebrospinal meningitis, when the auditory nerve is affected.

IF we are to prevent deafness our first step must be to eliminate the known underlying causes through careful examination of school children, thorough histories of each individual case followed by careful study and elimination, if possible, of all causative factors which are discovered. The prevention of deafness clinics must work in conjunction with properly conducted diagnostic and operative clinics designed to continue the study and carry out the recommendations of the diagnostic group.

Shambaugh reports about an equal number of cases of acquired deafness and congenital deafness in 3,120 children examined. There was no appreciable sex factor as regards incidence. His study showed that the most dangerous period for the development of severe deafness in children was before they had reached the third year. He concluded that diseases in the tonsils and adenoids probably play a great part in the mild disturbances of hearing, but naturally these can hardly be held responsible in severe cases where suppuration of the labyrinth and nerve involvement have occurred.

Probably one of the most common ways the middle ear becomes infected is through the improper blowing of the nose, in the presence of a head cold. What is said later about the prevention of head colds applies indirectly to the prevention of deafness. Parents should be instructed to teach their children to blow one side of the nose at a time and never to hold both sides and blow forcefully, as in so doing infected material is forced into the eustachian tube and then ino the middle ear. Everything possible should be done to protect children from scarlet fever, measles, diphtheria, mumps and influenza. Improper methods of swimming and diving should be avoided. The individual should protect his general health by proper food, fresh air, exercise, sunlight and clothing. periodic examinations of the hearing of school children are important for early detection of the beginning of deafness. Many unsuspected cases of beginning deafness are thus discovered, explaining why a child fails in his classes, has a speech defect, appears stupid or acts strangely.

COATES point out that most cases of progressive deafness in adults have their inception in neglected eustachian tube and middle ear inflammation in infancy and childhood. All ear complications of the acute exanthemata and infections of the upper respiratory tract should be carefully watched and treated until the physician is reasonably sure that normal hearing has been re-established. Treatment of the nose and nasopharynx during acute stages of inflammation is important. Warm alkaline solutions as nasal drops two or three times a day to cleanse the passages of tenacious secretions, ephedrine to shrink the mucous membrane, and at times, certain antiseptics such as argyrol or mercurochrome may be employed. In infants and young children dry suction of secretions is preferable to much local treatment, particularly if this local treatment is given without satisfactory co-operation of the child.

Prevention of repeated attacks of tubal catarrah requires careful removal of the lymphoid tissue in the nasopharynx, especially in the region of the fossa of Rosenmüller, and attention to any sinus infections present. Ventilation of the middle ear may be promoted by Politzerization and gentle ear massage. Vaccines often help to prevent colds and loss of hearing.

In case of loss of hearing a well qualified specialist should be consulted and the public should be warned against those who make exaggerated claims to cure severe forms of chronic deafness.

A SYMPATHETIC and cheerful attitude on the part of the physician goes far toward improving the morale of the deafened patient. The prognosis in most acute and subacute cases is good and the patient may be relieved of his anxiety by reassurance. A fair number of chronic cases will respond to treatment. When the hearing is not definitely improved further loss may be prevented. Occasionally the physician is obliged to tell the patient frankly that treatment is of questionable value and advise the patient to resort to a suitable hearing device and take up the study of lip reading.

The Common Cold

UNDER this heading are included numerous sequelae and complications of the head cold, such as: sinusitis, otitis, laryngitis, bronchitis, pneumonia and others. An eminent pediatrician once said to me, "If you succeed in eradicating the common head cold you will prevent the onset of most of the infectious diseases of childhood". The portal of entry of many infectious diseases is the mucous membrane of the nose and pharynx. As Woods Hutchinson so aptly expressed it, "Man's life ought to be measured, not by the years that pass over his head, but by the colds that pass through it". The United States Public Health Service estimates conservatively that the common cold inflicts a direct economic loss of $450,000,000 a year in this country.

Dochez, as a result of experimentation on anthropoid apes, concludes that the contagious head cold in human beings is caused by an invisible agent which, in all likelihood, belongs to the group of so-called submicroscopic viruses (This agent may be filtered but not cultivated). These viruses seem to stimulate into greatly increased activity any organisms present in the upper respiratory tract. Whatever the exciting cause, we know that diet, clothing, personal hygiene, fatigue—mental or physical, and climate are important factors. The principles of prevention in respect to the common cold may be properly stated as (1) avoid exposure to infection; (2) destroy the organisms and toxins; (3) build up resistance.

INFANTS and elderly persons, particularly those in poor health from any cause, should be kept away from individuals suffering with acute head colds. There is also the danger of falling a victim to head colds when one is mentally as well as physically fatigued. Under such circumstances a moderate amount of recreation in the outside air, such as a brisk walk or horseback ride, is valuable. One should be careful to avoid the dangers of swimming pools. It is difficult even with the best of care to keep swimming pools perfectly hygienic if they are used by a number of persons at one time. Organisms pass quickly from unhealthy noses and throats to healthy ones in infected water.

Atmospheric influences are frequently factors in causing colds and they cannot be altogether avoided. One must adjust oneself to the variations of the seasons and to the variations of temperature and moisture which may occur from day to day. The average healthy individual should not be encouraged to change his climate according to the season but rather he should be urged to develop his resistance. However, moving to mild, equable climates is justifiable on the part of invalids and those having poor constitutions. As Wells states, "If we consistently evade the asperities of the weather we shall not be able to resist them, but if we expose ourselves in a reasonable way, we increase our powers of endurance, and make ourselves gradually less susceptible to their harmful effects. There is good reason indeed to accept the view of Huntington that no nation has ever risen to greatness except in a climate marked by storms and sudden variations in temperature and humidity, not only from one season to another, but also from day to day. One may well endure cold when in good physical condition and blessed with especially robust circulation and vigorous vascular reaction, but not so the anemic individual who habitually leads a sedentary life, and whose skin circulation is sluggish and inactive."

THERE is much less danger if one is exercising when exposed to cold than if one is exposed during a period of relaxation with the body overheated. Under all circumstances one should avoid a

draft. There is little danger in being in a room with all windows open, compared to being exposed to a current of air striking the back of the neck through a partially open window or from some small crevice. A badly ventilated living apartment is a condition to be avoided, and it is important to be exposed as little as possible to a dust polluted atmosphere, The overheating of working and living apartments is one of the commonest causes of colds in this country. Overheated air soon becomes dry and nasal mucous membranes are unable to perform their normal functions. Attention to proper clothing is exceedingly useful in aiding the body to perform its normal functions. Harm is done by wearing clothing not suitable to the season or the climate in which one lives. Children should be well protected in cold weather because of the proportionately large surface of skin from which heat may be lost by evaporation or conduction, and old people, likewise, should be well protected because of their diminished power of heat production. The wearing of too much clothing is to be condemned just as much as the wearing of too little. Impermeable dress keeps out air and prevents the evaporation of sweat secretions. For the average individual the same weight underwear should be worn the year round and protection from cold, out-door weather should be secured by the use of heavier outer clothing. Wells calls attention to the fact that the Russians, in spite of their severely cold climate, catch colds with relatively little frequency and this may be attributed in no small degree to the habit of wearing a simple coarse linen underwear, and putting on heavy coats for the icy blasts of their outdoor winter life.

Proper diet is quite as important as proper air and proper clothing in the prevention of colds. The toxic origin of head colds has been emphasized by Stucky, Dwyer, Shurley and other rhinologists. Toxins may be absorbed from the extensive surface of the gastro-intestinal tract if food is indigestible and the intestinal action sluggish. On general principles one does well to limit proteins and increase the use of fresh vegetables, fruits and fruit juices. Pastries, fried foods and highly seasoned foods should be largely avoided. One can hardly expect benefit from the use of local treatment, such as sprays, douches and inhalants, when the real trouble is a general systemic disorder, the result of improper gastro-intestinal function.

LOCAL conditions which predispose to colds should be removed if possible. Any condition which causes nasal obstruction or irritation of the nasal mucous membrane by pressure is harmful and acts as a predisposing cause. Deviation of the nasal septum, spurs, nasal polyps or new growths usually require surgical removal. It is often wise to operate on the ethmoid labyrinth or the antra if these are the source of polyps. Only thus may their recurrence be prevented. In young children the adenoids are commonly the cause of head colds. These usually cause nasal obstruction, but not necessarily, as the adenoid tissue may be so located in a capacious throat as not to cause obstruction to the posterior openings of the nasal passages. Adenoid tissue, besides acting mechanically to obstruct the airway, is vulnerable to attacks of micro-organisms and infection quickly spreads throughout all the nasal membranes. In nearly all instances the tonsils are likewise involved and should be removed at the same time, except in very young children. It may be that up to a period of three or four years of age tonsils have some protective function. A comparative study of 48,000 school children, 20,000 of whom had had their tonsils removed and 20,000 unoperated children used as controls, showed the incidence of head colds to be greatly reduced in those from whom the tonsils had been removed.

On account of the location of the nasal accessory sinuses, secondary infection frequently spreads from the nose along the mucous membrane of these cavities. Sinus disease is not only caused by inflammation in the nose proper but in turn will cause it. These cavities may contain much pus or mucopurulent secretion and, by reason of closure or unfavorable location of the ostia connecting them with the nose, become so filled with purulent secretion that they act as closed abscess cavities. They thus become a focus of infection, impairing the health of the individual and predisposing him to severe head colds. The chief

symptom of sinusitis is the presence, at one time or another, of abundant thick discharge, often yellow, gray or greenish in color, accompanied by pain around the eyes, in the cheeks, or forehead, or sometimes a one-sided headache. In a fair number of patients suffering from sinus disease the pain, however, is completely lacking. When a head cold is persistent the sinuses should be carefully examined and treated. Excellent results will follow proper treatment. In chronic cases, particularly where the bone has become diseased, surgical methods may be necessary.

IN addition to avoiding exposure to infection, and using measures to destroy infection and toxins when present, it is important for the individual to develop his powers of resistance. Colds are contracted for the most part by persons who are susceptible and who have grown soft. To quote Wells, "As the exercise of functions is essential to the development of vigor, the coddling habit can have no other effect than to lessen the powers of resistance; and a pampering process is the surest means to paralyze the natural forces of immunity. A muscle seldom exercised grows soft and flabby; nerve cells which are seldom stimulated become inert; arteries relax when not frequently called into action; glands fail to secrete and atrophy if function is long suspended; and a joint that is never moved, in time becomes stiff and useless." One should accustom the body only to such weather conditions as one is exposed to, during the ordinary course of one's activity. A person may take occasion to face all kinds of weather inclemencies reasonably, but much harm may be caused by foolhardy exposure. The limit of one's tolerance should not be exceeded. Fatigue and over-exertion are the first danger signs; strain and exhaustion follow if one carries on one's exercise to excess. When exposed to cold, invoked as a stimulus, a healthy reaction should be obtained. Consequently when a person has an acute cold he should not be exposed to cold temperature but remain in a warm, comfortable room, securing rest. Cold showers or baths should be avoided in the presence of these acute infections, although at other times they are valuable in building up one's resistance. Proper exercise, securing fresh air in one's living quarters and office, and the proper use of baths are the principal methods to be employed for increasing one's ability to resist infections. In ventilating an apartment it is necessary to throw the windows open for a few minutes and let cold air in suddenly. The effect, after being shut in an over-heated, poorly ventilated apartment for some hours, is exceedingly stimulating. With practice one may accustom one's body to quite cold air, beginning gradually and being careful not to go to excess. The use of a cold shower or cold spray following a warm bath and surf bathing is beneficial. Cold baths should be taken in a warm room, the best time being early in the morning, and they should not be taken within an hour following a full meal. Sea bathing is especially beneficial because of the muscular exercise one secures in battling with the surf. A common mistake made by bathers is to remain in the water too long. Fifteen to twenty minutes is for the average person sufficient, and those not accustomed to it should remain not longer than five minutes.

IN my experience the use of vaccines, preferably autogenous vaccines, properly administered, is a valuable preventive for colds. Whether these act as desensitizing agents or by stimulating antibodies matters little from the practical point of view. Absolute scientific evaluation of vaccine therapy is difficult. Suffice it to say that many patients who have had them return at the end of periods of from one to three years for a new series, and state that they have been comparativly free from head colds during the interim. The ultra-violet ray no doubt is also useful in building up one's resistance to the common cold. It is a common observation that head colds are much more prevalent during the winter months when the ultra-violet rays of the sun are weak. It is important that heliotherapy be administered properly and at regular intervals. The dose should be such as to cause erythema rather than pigmentation.

We wish to mention briefly some features of preventive medicine in connection with the ingestion or inhalation of foreign matters. Sooner or later nearly

every sort of small hardware finds its way into the food or air passages of some unfortunate children. Many of these accidents may be prevented if mothers use care in keeping safety pins, needles, jackstraws, tacks, etc., out of reach of infants. Especially dangerous is the inhalation of vegetable foreign bodies such as peanuts, beans or peas. Swallowing of caustic chemicals such as lye or sodium hydroxide has caused the death of numerous individuals or, in the case of those surviving these accidents, has made invalids of them for years because of the occurrence of stricture in the food passages. Through the efforts of the medical profession, laws have been passed in many states requiring that containers of such corrosives be labeled POISON.

•

MUCH may be done to prevent the impairment of vocal function by proper use of the voice, by resting the voice when any disturbance manifests itself, and by attention to diseases and infections of the nose, sinuses and throat.

Summary

(1) Great interest has been shown, especially in the last few years, in the principles of preventive medicine.

(2) In the field of otolaryngology much may be done to prevent the chronic head colds and impairment of hearing. The principal measures to prevent colds are: to avoid contact with an individual suffering from a head cold; use of local measures to destroy organisms which are factors; the building up of one's resistance by proper diet, exercise, clothing; the use of autogenous vaccine; the elimination of mechanical disorders and diseases of the tonsils and adenoids or other foci of infection by surgery.

(3) Deaf-mutes should not intermarry nor should a person afflicted with a severe type of otosclerosis, with loss of hearing, marry an individual similarly afflicted. Every effort should be made to detect early loss of hearing in childhood and prevent further loss by eliminating the known causative factors.

Bibliography

(1) The Common Cold. A. R. Dochez, Jour. of Experimental Medicine, 52-701, Nov. '30.

(2) The Common Cold. Walter A. Wells, Macmillan Publishing Co., 1929.

(3) The Prevention and Treatment of Deafness. G. E. Shambaugh, Jr., Chicago Annals of Otol., Rhinol., & Laryng., 43-513, June, '34.

(4) The Nose, Throat and Ear and Their Diseases. Jackson & Coates. Pages 492 & 493.

667 MADISON AVENUE.

✚

BENZEDRINE SULFATE AND ATROPINE IN ENCEPHALITIS

ISIDORE FINKELMAN, Chicago, and LOUIS B. SHAPIRO, Elgin, Ill., (*Journal A. M. A.*, July 31, 1937), treated twelve patients with postencephalitic parkinsonism during consecutive periods with atropine, benzedrine sulfate plus atropine, benzedrine sulfate alone, and again with benzedrine sulfate plus atropine. The best results were obtained during the combined treatment of atropine and benzedrine sulfate. Although atropine alone caused a diminution of tremor and rigidity, the addition of benzedrine sulfate caused improvement in the sleep cycle and reduced the frequency or caused the disappearance of oculogyric crises, and there was a feeling of increased energy. Two of the patients died during an influenza epidemic. Both had a history of head trauma. The relation of increased sympathetic stimulation to a reduction in resistance to pneumonic infection and the contraindication of benzedrine sulfate in patients with head trauma needs further study.

DREAMS

When young men have vision, the dreams of old men come true.—Milton J. Rosenau, M.D., in the *Bulletin*, Kentucky State Department of Health.

The Common Cold:

ETIOLOGICAL FACTORS

THOMAS B. WOOD, M.D., F.A.C.S.

Brooklyn, N. Y.

THE object of this paper is to refresh our minds regarding the etiology of the so-called Common Cold. Without a good etiological foundation, one cannot make a diagnosis, and under such a condition often finds oneself making unnecessary explanations to justify the diagnosis of a cold when in fact the patient is suffering from measles or poliomyelitis—a rather foolish predicament to be in.

The literature of the last decade is so rich with opinions on this important topic, and which are so at variance, that anyone has the right to hold or express his own. Of those patients who have sought relief at my hands the great majority suffer from an imbalance of the autonomic nervous system, which exhibits itself as a vasomotor disturbance somewhere in the respiratory tract; whether as a coryza, hay fever, rhinitis, sinusitis, pharyngitis, laryngitis, tracheitis, bronchitis or asthma. Many of these patients may also exhibit endocrine disturbances, vitamin deficiencies or mineral deficiencies, and nearly all show signs of disturbance of the acid-base balance.

Definition

Webster's definition of a cold is "A disorderly body condition, generally of the respiratory tract, produced by exposure; a catarrh; coryza." Stedman's Medical Dictionary says, "Cold: a catarrhal affection, especially of the respiratory mucous membranes". Russell L. Cecil[1] says "The scientific name for the Common Cold is acute coryza or acute rhinitis". These definitions agree fairly well as to what a cold is but very few authorities agree as to what causes a cold.

The causes can be conveniently divided into extrinsic and intrinsic, those from without and those from within the body itself. Under each of these headings we have predisposing causes and exciting causes. The predisposing causes are the most important to the lay mind and the most interesting to the medical mind.

Climate

Wilson G. Smiley, a research worker at Harvard University, in his study on climate, says there is "a close parallelism between nasopharyngeal flora in an isolated semitropical farming community in Alabama, a remote semi-arctic trading post in Labrador and a temperate climate in New York City." In Upper Egypt, where the temperature varies from 15° to 20°, common colds and catarrh of the lungs are infrequent, but such as occur are mostly from November to March. In the cold regions of Russian Siberia they are less frequent than in England. In Iceland there is usually an epidemic wave from October to March. These outbreaks often coincide with the arrival of laborers, fishermen and scholars. Smillie[2] (not the Smiley just mentioned) states that his studies indicate that the specific agent is infectious in nature and spread by direct contact, with an incubating period of from one to three days, and also presents strong evidence that environmental factors, particularly reduction in atmospheric temperature, have some influence upon the incidence of colds. It seems, then, from the records, that colds are less frequent in frigid and tropical climates than in the temperate zones and that the incidence of colds depends more upon the season than upon the climate.

Season

The season of the common cold, in the opinion of most authorities, is spring and fall, with the peak occurring in

January, in the temperate zones. In the frigid or tropical climates the season of immigration or visitation by travelers is the contributing factor of epidemics.

Temperature

Heat or cold are not in themselves causative factors, but a sudden drop of 10 to 15° is most generally accompanied with an epidemic, especially if the barometer is low and the atmosphere is wet. Humidity, whether in winter or summer, is a very prominent factor in the opinion of most observers.

Fog

VanLeeuwen[3] gives a good picture of the death fog that hung over the Meuse Valley for a week during December, 1932, in which 63 deaths occurred in 24 hours. A great number of the population were taken by irritative symptoms in the nose, mouth pharynx, trachea and bronchi. The mucous membranes were red and swollen. The patients suffered from coryza with violent coughing and increased respiratory rate. In severe cases dyspnea, cardiac dilatation, rapid pulse and cyanosis were evident. The fatalities only occurred south of the city of Liege, where there are numerous factories, the theory being that the fog particles were heavily charged with sulphur dioxide and hydrofluoric acid from the many zinc and super-phosphate factories. These facts prove that poisonous substances in the air are concentrated and held in suspension by fog, causing a very definite health hazard.

LeGuiyon and Grootten[4] in 1930 and 1931 made quantitative and qualitative determinations of the organisms present in atmospheric air under different meteorologic conditions, especially on foggy days and days without fog. They found an average of ten times more organisms on clear days than on foggy days. These facts accord with Miquel's observations that there are fewer germs in the air on rainy days than on clear days. The presence or absence of filtrable infectious organisms in fog, however, could not be demonstrated.

Race

No race has been found to be immune. However, army surgeons report in extensive surveys that colored races are more susceptible to infections of the deep respiratory tract, such as pneumonia, while white men have more superficial colds and influenza.

Age and Sex

Age and sex are not etiological factors. Smiley found that Cornell women had fewer colds than Cornell men. The Public Health Service found that women working for Boston Edison had more colds than the men. Dr. Dochez, following his monumental study, concludes that sex and colds are unrelated.

Occupation

Studies of the Metropolitan Life Insurance Company, whose medicos worked under the direction of doctors William H. Park and Willis Clark Noble, conclude that office workers are nine times as cold-ridden as taxi-drivers, four times as afflicted as United States Army men and that the United States troops are the most cold-susceptible in China. The Kuomintang soldier fears a cold as much as he does an enemy bullet. From the ten year record, kept by the Public Health Service, of the disabling illnesses among the employees of the Boston Electric, investigators discovered that respiratory diseases accounted for 47 per cent of the sickness and that colds made up 71 per cent of these diseases. Time lost per man per year was almost three days. Metropolitan Life found that its clerks lost about one day a year from colds.

Habits and Customs

Smoking, sleeping eight hours a day, taking cold baths, mouth breathing, wearing rubbers, according to the conclusion reached by Smiley on the basis of a questionnaire sent around to Cornell students, are not major factors, but those who wore little underwear and took little exercise had the fewest colds. However, drinking and smoking do seem to have an influence on certain individuals that makes them prone to colds. Fatigue is one of the most important contributing factors while constipation and gastro-intestinal infection rank exceedingly high.

How to avoid overcrowding is the bugbear of every department of health in every city of any size. Any individual during the incubation or active stage of

a cold is a direct menace to the hundreds of contacts made in public gathering places. Theaters, churches, halls, schoolrooms, subways, trains and buses are places to be avoided by susceptible individuals during an epidemic, not because these are not good places to visit, but because there is no guarantee that infection carriers will be prohibited admission. The overheated home is an etiological factor that ranks high as a predisposing cause for colds. This is because, in attempting to heat the air for more bodily comfort, the moisture content is decreased with the consequent drying out of the respiratory mucosa where the bar of the first line of resistance is let down.

Unequal chilling of the body is a prime factor. It is the draft on the back of the neck, exposure to the wind without proper protection, wetting the feet, sitting near an open window or electric fan and so on that cause the sedentary worker to catch cold. Soldiers, policemen and other outdoor workers become seasoned by constant exposure and contract colds less frequently.

Dust

House dust, road dust and soil dust from erosion, in addition to being sources of mucosal irritation, actually carry infection in the desiccated state that will infect as long as twenty-four days after. Other dusts, such as granite, sand blast, construction sand, powdered quartzite, flint, quartz and asbestos are dangerous, due to their silica content. Rock dust, coal dust, brick dust, chalk dust, flour dust and so on are more easily handled by cilia and phagocytes but are predisposing causes of the common cold because they often break down this defense. Fumes and chemical compounds in industrial cities and towns often provoke sneezing and running at the nose followed by a feeling of discomfort and cold.

Allergy

Foods and certain other dusts cause colds because of the allergic reaction set up in the susceptible individual. Milk, wheat, eggs, strawberries, moulds, hay pollen and so on are sufficient to illustrate one of the most common causes of rhinitis and coryza which, under our definition, is synonymous with the common cold.

Among other conditions that simulate common colds, in their early stages, may be mentioned measles, tonsilitis, influenza, septic sore throat, scarlet fever, meningitis, pneumonia and tuberculosis, all of which reactions are allergic in nature and are characterized by symptoms of rhinitis and coryza, so that one has to be on guard in making a differential diagnosis.

Vectors

The contagious cold is contracted directly from another person and can be passed on to others. The method of transmission is from the nasal and buccal secretions of the infected person to the nose and throat of a susceptible person. Thus, coughing, sneezing and even talking spray the surrounding atmosphere for an average distance of twelve feet with infectious material. Kissing gives a direct transfer and is an infallible as well as common source of the infection. Utensils, glasses, towels, hands, and handkerchiefs of an infected individual are all potent transmitting agents.

Bacteriology

The organism has not and probably never will be found because a common cold is a symptom complex and not a disease entity. However, each of several germs, individually, has been definitely proven a cause. There is more than one type of organism that gives the same set of symptoms and the same physical findings. The latest to be added to the list is the ultramicroscopic filtrable virus described in the latter part of 1932. Whether this tiny microorganism is truly responsible for the common cold or influenza is being doubted by very good authority[5], to wit, J. E. R. McDonagh. It is felt that there may be several other viruses, mutations of various organisms normally found in the gastro-intestinal and respiratory tracts which future research may bring to light, that are also responsible for the common cold. No one can doubt the infectiousness of these agencies.

All physicians are familiar with the following exciting causes of nasal catarrh: the pneumococcus, bacillus of

Pfeiffer. *Micrococcus catarrhalis, Staphylococcus aureus, albus* and *citreus, Streptococcus hemolyticus, viridans, mucosus, faecalis* and just plain strep, Friedländer's bacillus, diphtheroid organisms, *Bacillus septus, Bacillus coryzae segmentosus, Micrococcus tetragenus* and *Bacillus proteus.* These are also normal inhabitants of the pharynx and nasopharynx, but usually in very scant numbers. However, under the stimulating influence of any of the predisposing factors they multiply profusely and sometimes set up violent reactions.

Complications

It has been noted that directly following the inception of a cold, the normal basic nasal and pharyngeal flora changes to one associated with certain pathogens enumerated above and known to be associated with the complications of colds. Common among these diseases are to be found pharyngitis, tonsillitis, otitis media, adenitis, mastoiditis, sinusitis, bronchitis, pneumonia, pyelitis in children, appendicitis and, to add something not found mentioned in this sense before in the literature, oral sepsis. If the histories of these conditions are carefully scrutinized, it will be frequently found that an acute cold antedated the disease. The same reasoning holds true of any of the acute infectious diseases of childhood.

If the conclusion that the real cause of the common cold is a filtrable virus is tenable, it may be assumed that this ultramicroscopic organism is not only the exciting cause but also renders the host more susceptible to the invasion and growth of organisms causing serious or fatal conditions.

Intrinsic predisposing causes, such as allergy, endocrine hypo- or hyperfunction, vitamin or mineral deficiency, metabolic imbalance, and biochemical disturbance of the acid-base balance, already mentioned, are conditions that make it very inviting for the pathogenic organisms to step in and confuse the picture for the diagnostician as well as oftentimes to cause the patient to become violently ill.

Other individual pathological contributing causes are anatomical deformities in the nose and throat. For instance, anything that obstructs the nasal passages, such as atresia, adenopathies, deflection of the nasal septum, polypi nasi, or hypertrophied turbinates, deflects the air stream through the nose, congests the mucosa and offers corners or crevices where dust and micro-organisms can gather and reproduce. People with such deformities are frequent sufferers from the common cold. Any condition that overworks the cilia so that they cannot dispose of the mucus and debris physiologically is conducive to colds. That the cilia lie down on the job is one of nature's defense mechanisms, when the mucosa is overwhelmed, to prevent a normal function becoming an accessory in the dissemination of disease farther into the sacred precincts of the human body. Obstruction or narrowing of the ostia of the nasal sinuses brings about the same result. Where the cilia are killed or their action lessened, micro-organisms invade the respiratory membrane, where, giving symptoms of a cold, they notify their host of their invasion so that the host has ample opportunity to bring up the next and more powerful lines of defense. The presene of tonsils and adenoids whose crypts invite infection is, in the majority of cases, a distinct hazard. Likewise caries of the teeth, pyorrhea of the gums, and lack of oral hygiene are prominent factors in the causation of colds.

Then there is that hypersensitive group of neurotic and high-strung people, who live under high tension, as singers, actors, stock brokers, and professional men, with vasomoter instability, who contribute often to their own misery by being "naturally" subject to colds without other pathological findings.

Conclusion: There is no satisfactory clinical definition of the common cold. Research workers, clinicians and the old family doctor all disagree on the answer.

The common cold is the most widespread of all diseases. It is endemic everywhere; epidemics are common, especially in the temperate climates, and pandemics often sweep the world about once a generation. It is seasonal and is spread by droplet infection, through pollution of the air from sneezing and coughing. It follows lines of travel and is also spread by hand to mouth. Overcrowding, improper clothing and bad hygiene are contributing causes. The

exciting etiological factors are many, the chief ones being, at present, a filtrable, ultramicroscopic virus, any one of the large family of streptococci, staphylococci, diplococci, or any one of a large number of bacilli such as Pfeiffer's, Friedländer's, the colon bacillus and so on.

It is not desirable or necessary to distinguish between the part each microorganism responsible for the manifestation plays, because more is to be gained by realizing that all are equally concerned and that all underlying allergic and metabolic manifestations must be at the same time considered.

References

1. Cecil, Russell L.: Colds, causes, treatment and prevention. D. Appleton and Co.; 1925, page 15.
2. Smillie, Wilson G.: The Journal of Experimental Medicine, 53; 733-752 (May, 1931).
3. VanLeeuwen, W. Storm: Münchener Med. Wchnschr. The Fog Catastrophe in the industrial region south of Liege, 78; 49-50 (Jan. 9th, 1931).
4. LeGuiyon, R. F. and Grootten, Olga.: Bacteriological Analysis of Air Charged with Fog. Comptes rendus de la Societé de biologie, 106; 601-602 (February, 1931).
5. McDonagh, J. E. R.: The Common Cold and Influenza; Wm. Heineman and Co., Ltd., London, Eng. 1936; 72-78.

878 PARK PLACE.

TREATMENT OF ULCERATIVE COLITIS

In ulcerative colitis there is a raw ulcerating mucous membrane, and thus to obtain the maximal benefit from kaolin and aluminum hydroxide JAMES B. EYERLY and HERBERT C. BREUHAUS, Chicago (*Journal A. M. A.*, July 17, 1937), give it only by rectal retention. First, the colon is cleansed with a pint of warm water. In one hour this is followed by a retention enema consisting of a 3 to 5 ounce (60 to 150 Gm.) mixture of kaolin and aluminum hydroxide in from 3 to 5 ounces (90 to 150 cc.) of warm distilled water. The patient is instructed to retain this as long as there is no discomfort. Usually one retention a day is sufficient, but occasionally two are given.

IS CANCER ON THE INCREASE?

Since the collection of mortality statistics became more nearly an exact science, comparatively few years ago, the reported deaths from cancer have increased in number markedly, at first sight it would seem almost alarmingly. Thus, in 1900, there were 63 deaths from cancer per 100,000 of population; in 1910, the rate had risen to 76.2; in 1920, it was 83.2; and in 1930, 97.2; while in 1933 there was a still further rise to 102.2. On the face of it, these figures would seem to indicate an increase in mortality so rapid that complete extinction of the race by cancer might be expected in a few more decades.

But actually the students of cancer say that, serious as the situation is, there has been no real increase in cancer deaths, and that the change in the reported rate is due to various factors, such as (1) improvement in statistical accuracy, (2) better diagnosis, because of increased medical skill and greater hospital facilities, and (3) the rise in the average age of the general population. This last must be taken into consideration since cancer is increasingly frequent as age advances, more than one-half of all the cancer deaths occurring after the age of sixty years, while only two per cent occur before the age of thirty years. A comparison of the cancer death rate with the death rate of other diseases shows that cancer stands second on the list.

COMPOUND SOLUTION OF TANNIC ACID

BERNARD FANTUS and H. A. DYNIEWICZ, Chicago (*Journal A. M. A.*, July 17, 1937), show by experiment that the more concentrated solutions of tannic acid produce a denser and therefore probably more efficient crust. They conclude that 10 per cent of tannic acid is likely to be the most desirable strength of the solution. In view of the fact that the solution is intended to be applied to a raw surface, it seems logical that isotonicity might be desirable or, better, that the ions naturally existing in the tissue juices be present in the solution ("iso-ionia"). This suggests the use of physiologic solution of sodium chloride or, still better, of Ringer's solution as the solvent. Through experiment they find that Ringer's solution is the best solvent for the tannic acid.

BACTERIOLOGICAL AND RESEARCH ASPECTS OF THE *Common Colds*

SAMUEL ZWERLING, M.D., F.A.C.S.

Associate Attending Otolaryngologist

Greenpoint Hospital; Assistant Surgeon

Brooklyn Eye and Ear Hospital

Brooklyn, N. Y.

A review of the literature reveals the great scope of the subject and the vast amount of research that has been done to determine the actual bacteriology of the common cold. "The common cold is in fact not a clinical entity and it defies definition on clinical grounds" (1). Scientific observations show many variations in the bacteriology, but it is known that the common cold is an infectious and contagious disease, that it is bacteriologic in origin and that the infection is due to a filtrable virus. Unfortunately, the common cold makes its début in the upper respiratory tract, which even under the most favorable conditions is the so-called normal habitat of many types of potentially pathological organisms. Of these, the most frequent are the *Haemophilus influenzae, Streptococcus hemolyticus, pneumococcus,* and the *Staphylococcus aureus.* "These flora are present during the state of normalcy as well as during an attack of a fresh cold." At the onset and during early stages of a cold the *Haemophilus influenzae* is not recovered with as great frequency as during the later stages. "The bacillus was found in 43 per cent of normal persons and 93 per cent of those suffering from influenza" (2). "Some investigators consider the bacteria secondary invaders: but regardless of whether this is true, the complications are the results of bacterial invasion" (3).

PAUL and Fresse found in a year's observation of respiratory diseases in the arctic mining town of Longyear City, Spitzbergen, that "the common cold is initiated by one or more specific infective agents and that the disease is spread by direct contact" (4). These investigators also found that "the incubation period appeared to be about forty-eight hours and that the disease varied in different individuals who had presumably been exposed to the same virus. Some persons seem to have a complete immunity while others develop an immunity of short duration after an attack." The incidence and distribution of the cases followed the arrival of the first boat, involving almost the whole community in a short time. They also found that unfavorable environment, exposure or weather was not necessary for the development of an epidemic. "The bacterial flora of the nasopharynx did not play any significant rôle in the initiation of the common cold." Cultures from normal persons showed striking similarity to those obtained in the tropics and the temperate zone. The chief difference was that the staphylococci and the hemolytic streptococci were virtually absent in the Spitzbergen population. Their study further confirmed the fact that "fixed types of the pneumococci and hemolytic streptococci are rarely encountered in isolated communities." It also indicates that the various other groups of aerobic organisms isolated must be considered as normal inhabitants of the nasopharynx since they occur in normal throats in widely scattered geographical areas. "It would be quite consistent with our observations to assume that the

epidemic of colds described in this report was due to a filtrable virus of the type described by Dochez and Long" (5).

"The view that virus is a primary cause of the common cold does not exclude bacteria from the rôle of secondary invaders" (6). "Recovery of the influenzal organism from cultures from normal individuals reveals fluctuation in various periods of the year as well as in different years" (7). Topley & Wilson cite experimental infection of workers with influenza and they also state that "the *H. influenzae* may produce in monkeys a disease which bears resemblances to that in man" (8). The fact that negative findings were obtained in June and July, 1918, resulted most likely from unsuitable media, for in the winter epidemic of that year there was a greater percentage recovery of the influenza organism and this coincided with the improvement of the various types of media prepared from altered blood (Loc. cit. 9).

WITH the improvement in the preparation and adaptation of culture media the three postulates of Koch have been fulfilled. 1. The organism should be found in all cases of the disease in question and its distribution in the body should be in accordance with the lesions observed. 2. The organism must be shown to be a living thing and must be cultivated outside of the body of the original host in pure culture for several generations. 3. The organism, so isolated, must reproduce the disease in other susceptible animals (Loc. cit. 10).

The incidence, degree of severity, complications and sequelae once again fall into the well known explanatory version of the medical student, when he states . . . "depends upon the resistance of the host, the type and the virulence of the infecting organisms."

THE manner of entrance into the body, be it bacterium or virus, is a subject which is still controversial. Those familiar with the work of Jarvis of Vermont appreciate to the fullest extent the necessity of the proper acid-base balance in the blood. Any major disturbance in the normal acid-base balance is recognized by the experienced rhinologist in the deviation from the normal thin, moist, smooth, pale, pink nasal mucosa. If the mucosa of the upper respiratory tract is to resist invasion it can only do so when in a normal state of health. When an individual "catches cold" "after exposure," "staying out late," or "after excess of one kind or another," he attributes his catching cold to his general body weakness. Be that as it may, it is the local resistance which has been reduced by either the change in the acid-base balance or the alteration of the normal surface tension of the mucosa. The resistance to invasion of an infecting organism depends upon the integrity and continuity of the local tissue. In the nasal mucosa the maintenance of normal surface tension is in our opinion of paramount importance in resisting the local invasion of organisms or their products. Any disturbance or variation in the surface tension is a potential factor in the ability of the organism to do damage in an area which until that time was the more or less normal habitat of the same organism or group of organisms.

The rhinologist enjoys a clinical advantage in the observation of the gross changes in the nasal mucosa. He has learned to recognize the importance of normal air spaces in the maintenance of physiologic respiration. The maintenance of the health of the entire upper respiratory tract depends upon the normal nasal air space, ventilation and aeration of the sinuses. For, briefly, not only is the preparation of the inspired air of paramount importance to the health of the tracheopulmonary tree, but any infected discharges from the sinuses or pharynx are a definite insult to the mucosa of that tree.

THE action of the cilia of the nasal epithelium is another safeguard in the maintenance of both local and general health. Bathed in normal mucous secretion, the flagellation and surging of the cilia propel foreign bodies and infection posteriorly. Thus, under normal conditions, has nature bestowed upon us another mechanism of defense. A cessation of the flagellations can be produced by drugs and by abnormal secretions. It is

believed that the interference with the normal action of the cilia is a factor permitting the organisms to gain entrance into the body. On the other hand, it has been stated that it is this sudden arrest of the ciliated action which engulfs and enmeshes the infecting agent, keeping this agent localized and thus preventing possible spread or invasion into the system (11).

IN the more recent studies the protein molecules are receiving more and more attention. In all probability it is this bacterial protein molecule or filtrable virus protein molecule which is responsible for the general symptomatology as well as the local disturbances of the common cold. The general malaise, headache, fever, chilliness, dizziness, etc., of the severe influenza can be induced by the injection of the foreign protein molecule of other organisms, especially of the typhoid group, which are richly supplied with the protein element.

THE general defenses of the body mechanism are brought into effect, of course, by the tissues involved and to no less a degree by the blood. "The majority of observers agree that agglutinins appear during the first week of the disease. In regard to their persistence in the blood there seems to be some disagreement" (12). The presence of precipitins is questionable (13). 'The alexin fixation test has been used by many workers as evidence for the presence of antibodies against *H. influenzae* in the blood of acute cases of influenza with more success than either of the above-mentioned reactions." Gay quotes Kolmer, Trist and Yagle, who found an increase in thermostable opsonins for *H. influenzae* during influenza, especially after the first week of the disease.

One attack of the common cold does not confer immunity. Organisms associated as causative agents of the common cold have also been found in the respiratory tract in the presence of whooping cough, measles, diphtheria, and chickenpox. Does the individual reinfect himself when he develops a so-called relapse?

FROM the bacteriologic point of view, biologic products for the treatment or prevention of the common cold have had as many proponents as opponents. Owing to the heterogeneity of the organisms of the influenza group, theoretically, vaccines and sera have no actual place in the prevention or treatment. Yet, clinically, it seems that the employment of biologic substances has minimized the frequency and severity of the common cold. The employment of a mixed polyvalent stock vaccine has in several cases minimized the postoperative reactions and has improved materially the convalescence after adenotonsillectomy. Some have claimed that the favorable results after the employment of vaccines have been due to a non-specific protein reaction (12).

THE final chapter of the story titled "The Common Cold" remains to be written. A royal welcome awaits the author. Yet, we in no way minimize the Herculean efforts of the tireless workers who have given us a vast amount of information, even though many phases of the subject border and trespass on the realm of negativism. Especially valuable are the work and research of the Pickett-Thompson Laboratories, Gay and Associates, Stanley of the Rockefeller Institute, and Cecil and Dochez. Be the infecting agent filtrable virus or bacterium or a mixture of these, the resistance to the host depends not alone on the local manifestation (acid-base balance, surface tension, ciliated epithelium), but also on general good health. The incidence of the common cold would seem to be precipitated by a new strain of infecting agents or a greater number of infecting agents transmitted from carrier to host by the carelessness or unhygienic behavior of an individual who himself is suffering from the common cold.

References

1. The Principles of Bacteriology and Immunity—Topley & Wilson, 2-1032; William Wood & Co.
2. Pritchette & Stillman—J. of Exper. Med., 29-259.
3. Maytum, C. K., Proc. Staff Meetings, Mayo Clinic, 11-828, 1936.
4. Paul, J. M. & Freese, H. L.—An Epidemiological and Bacteriological Study of the Common Cold in an Isolated Arctic Community (Spitzbergen), Am. Jr. Hyg. 17-517, May '33.
5. Docherz, A. R., Mills, K. C., Kneeland, Y., Jr.—Lancet, 221-547, 1931. Long, P. H.; Doull, J. A., Bourn, J. M., McComb, E.—J. Exper. Med., 53-447, 1931.
6. Goldsmith, Perry G.—Trans. 42nd. An. Meet. Amer. Laryn. Rhin. Otol. Assn., 1936, p. 274.
7. Bourn—J. Preventive Med., 2-441, 1928.
8. Topley & Wilson, p. 1086.
9. Topley & Wilson (Loc. cit.), p. 1084.
10. Topley & Wilson (Loc. cit.), p. 591.
11. Wood, Thomas B.—Personal communication.
12. Gay—Agents of Disease and Host Resistance, p. 806, 1935; Thomas.
13. Ibid.

789 ST. MARK'S AVENUE.

CONTROL OF WHOOPING COUGH

LOUIS SAUER, Evanston, Ill. (*Journal A. M. A.*, Aug. 14, 1937), reports that in 1934, soon after the paper entitled "Immunization with Bacillus Pertussis Vaccine" was published in THE JOURNAL, Dr. John W. H. Pollard Evanston Commissioner of Health, opened a municipal whooping cough prophylactic vaccination clinic at the "Health Center." Because immunization with diphtheria toxoid had been reported less permanent when given in very early life, and as most deaths from pertussis occur during infancy, pertussis vaccination is given before diphtheria toxoid—preferably between seven and ten months. At least several months intervene between pertussis vaccination and any other immunization procedure. To determine whether the customary total dosage of 2 cc. of authorized commercial vaccine is sufficient to protect children more than 2 years old, fifty "Welfare" children between 2 and 4 years of age were included. The two-hour clinic is held on six consecutive Wednesday afternoons. Usually about fifty new candidates are injected at each of the first four weekly conferences, so that 200 or more vaccinations are completed in six weeks. In the spring clinic the one, in the autumn clinic the other, brand of vaccine authorized by Northwestern University Medical School is used. The injection site (upper arms) is sterilized with alcohol. The physician in charge injects the vaccine just under the skin. Mothers are cautioned not to apply anything locally if a transient redness appears. No severe reaction or infection has occurred. The number of Evanston children injected annually since 1934 by private physicians and at the municipal Health Center is summarized in a table. With improvement in the economic status during the last few years the annual number privately injected has increased, whereas the number of municipal injections has correspondingly decreased. At seven semiannual clinics, 1,122 Evanston "Welfare" children completed the pertussis prophylactic vaccinations. Prior to June 1, 1937, at least 2,769 Evanston children have completed the prophylactic injections. Six clinic children developed whooping cough after vaccination. Because five of the six who developed pertussis were more than 2 years old when they were injected, the total dosage for children of more than 2 or 3 years was increased in 1936 to 10 cc. The initial dose remains unchanged (2 cc.), but the second and third doses are increased (from 3 cc. to 4 cc.) if the child is more than 2 years old at the time of injection. For children younger than 2 years the total dosage is 8 cc. (2, 3, 3 cc. at weekly intervals). The course of the disease in five of these children was mild; it was quite severe in one. Because untreated whooping cough varies in severity and duration—light cases outnumber the severe—proper evaluation of any therapeutic measure is difficult.

HOW TO KEEP FROM *Catching Cold*

EDWARD E. CORNWALL, M.D., F.A.C.P.
Brooklyn, N. Y.

THERE are those who, striving after scientific and verbal precision, say that we do not catch cold, but become infected. It is true that we become infected; but the expression, catching cold, has been established by long and respectable usage as referring to a common disease; and its use is justified by the emphasis which it places on the most important, or the most frequent predisposing cause of this disease, viz., chilling of the body. To decry the use of this term would make for the discrediting of this predisposing cause. Catching cold is an elliptical expression. To fill in the ellipsis, we might say: Catching [an acute infective disease of the upper respiratory tract which is regularly predisposed to by exposure of the body to] cold.

The disease which we call a cold, and which we often catch after exposure to chilling, is probably the most frequently occurring of all our definite diseases. It is not in itself a serious disease, but it can have serious complications and consequences.

ALL people are not equally susceptible to this disease; there are constitutional differences. Particular disease conditions may predispose to it: a chronic focus of infection in the upper respiratory tract is such a predisposing condition. An undue susceptibility to colds may be acquired by unhygienic living: the individual may make himself "tender" by too confined or too inactive a life, or by living in an overheated or overdry house atmosphere, or by wearing too heavy clothing, or by irritating his mucous membranes with tobacco smoke, (for the widespread notion that tobacco smoke is a local disinfectant which protects against infection is not well founded), or by an unwise diet.

The most extensively called for precautionary measure against this disease is prevention of chilling, and especially uneven chilling of the body. Such chilling can come from exposure to drafts, and especially when the body is perspiring; from remaining too long in a cold place; from going around with wet feet or wet clothing; and from going out of a warm house in cold weather when the superficial blood vessels of the body are dilated, as after taking an alcoholic drink or a cup of hot tea. A very foolish way of catching cold is to stand in an open doorway in cold weather, dressed only in house clothes, while bidding good-by to a lingering, loquacious visitor. Going out of doors in cold weather immediately after taking a hot bath is an effective way of catching cold. It is generally healthy to sleep in a cold room, but to sleep in too cold a room is not so; and sleeping under light bedclothing when the temperature suddenly drops favors catching cold.

One of the principal avenues by which drafts come to chill the victim is through open windows; and the current of air need not be very cold for the purpose. Some people have exaggerated notions about ventilation; they have a mania for opening windows. They may think that they are endowed with superior resistance; sometimes they flatter themselves in that respect. Innocent bystanders are often put in peril by them. Confusing a draft with ventilation is a mistake which may have serious consequences.

It often happens that a cold is caught shortly after eating a hearty meal. Chronic wrong eating, as well as acute dietetic indiscretions, can lower bodily resistance and predispose to catching cold.

Overfatigue can predispose to this disease. Those who are physically or mentally tired should especially guard against chilling. Lack of sleep is also a predisposing cause.

Precautions against direct infection are constantly required. The infective agents are widespread in civilized communities, and are always ready to attack those whose bodily resistance is low. But without the bodily resistance being especially low, direct infection can take place if the infective agents are in large quantity or of extra virulency, as often happens in the acute disease. Individuals with a cold should not be given opportunity to cough, sneeze or talk in other people's faces. And in crowded places, such as subway cars, it is well to keep the mouth closed; and especially in subway cars should the mouth be kept closed when the air currents produced by the whirling fans attached to the ceilings of the cars are vigorously disseminating the germ-laden dust in the cars and the germ laden droplets emitted by the infected coughers, sneezers and talkers present, and at the same time chilling the individual and lowering his resistance to infection. And after touching contaminated surfaces, such as those in public conveyances and buildings, the hands should be washed before eating.

When returned to shelter after having been chilled, it is well to warm the body immediately by getting near a source of heat and by imbibing a good quantity of reasonably hot fluid.

Following is a short rule for keeping from catching cold. Take care of your general health; keep out of drafts; don't let people with colds cough, sneeze or talk in your face; keep your mouth closed in crowded places and when out of doors; and after having been chilled, get warmed up as soon as possible.
1218 Pacific Street.

TREATMENT OF LUNG ABSCESS BY GUAIACOL INTRAVENOUSLY

CHARLES H. NAMMACK and ARTHUR MARTIN TIBER, New York (*Journal A. M. A.*, July 31, 1937), state that in about fifty cases guaiacol was used intravenously in the treatment of lung abscess. Their present article deals with the procedure and method of carrying out the treatment and presentation of twenty cases. The purpose of their study was to investigate the effects of guaiacol on the course of acute and chronic nontuberculous lung abscess. The patients felt considerably better in a very short time after its administration, owing to the subsidence of the fever and cough and to the decrease of the daily sputum output and the loss of its foul odor. Serial roentgenograms showed early regression of the large area of pneumonitis surrounding the abscess cavity and later its actual disappearance. It is felt that the eradication of all foci of infection about the mouth, nose and throat and moderate restriction of all activities until the roentgenogram shows complete healing is very essential if the results of this type of treatment are to be permanent. Of the four deaths in the series, one was due to a malignant condition of the lung, one to traumatic subdural hemorrhage and two to recurrence of the abscess. The abscess reappeared in those patients who refused to have their infected gums treated. Because many lung abscesses heal spontaneously and because of the danger of early operation, most authorities agree that acute lung abscesses should be treated medically from six to twelve weeks before any surgical procedures are resorted to. Yet, after reviewing the literature, one is impressed with the lack of active medical treatment during this period. As the intravenous use of guaiacol causes early subsidence of the symptoms and a regression of the pathologic condition in the lung without producing any unfavorable reactions, it appears that this type of therapy should be used in the treatment of patients with acute and chronic lung abscess.

MENTAL HYGIENE NOTES

A DECALOGUE OF *Character*

FREDERICK L. PATRY, M.D.
Albany, New York

THE original meaning of the word character had to do with the distinguishing scratch or mark on a stick or stone. We thus gain the concept that character has to do with the enduring, consistent, dependable and distinguishing traits of an individual. It also follows that character is the product of the substance of original endowment (heredity) and of the environmental factors playing upon it giving it shape and identity.

Character, in its broadest sense, may be taken to mean the measure of an individual to make a satisfactory adjustment to life wherever he may be situated, and that with a reasonable amount of success and happiness. Character has to show itself through behavior in the various activities of life's demands, not merely in responding to one's duties but also to one's opportunities. These should be looked upon as obligations to make the most of one's possibilities.

We are concerned with the character of the total individual, which we feel can only best be realized by having first-hand knowledge of one's physical, mental, emotional, social and hereditary aspects of character. We must know each person's strengths, weaknesses and needs, and seek the best means of fulfilling these needs.

The psychiatrist is primarily concerned with the total person behaving or adjusting to life. He concerns himself with all the facts and factors which need to be organized in developing character. He attempts to interpret the factors hindering full-fledged enjoyment in social adjustment. Each individual is regarded as a twenty-four hour performing human mechanism each day of the week. He must be studied in a continuous fashion in order that unwholesome character traits may be recognized and nipped in the bud. Experience has shown that if we earnestly set about solving the problems of *prevention* of unwholesome behavior patterns we surpass many times in effectiveness the remedial or curative aspects of character functioning.

Now let us formulate a few suggestions which we feel will be of assistance in furthering the art of living wisely and well.

I. Keep Physically Fit

SINCE mind and body can not be separated but are knit together so that each person reacts as a total unit, it behooves each of us to keep his physical functioning at its best. More and more people are visiting their physician, dentist and specialists in the various branches of medicine annually or semi-annually before sickness overtakes them. One specialist in children's disease and children's health problems recently stated that over 80 per cent of his practice consists of examining and directing the health program of his patients. The remark was made that he would starve if his practice depended upon waiting until his patients became bedridden. In a similar vein, a well-known psychiatrist recently made the statement that over forty-five per cent of her practice consisted of treating so-called "normal" or average persons who were handicapped by one or more problems of emotional maladjustment or

mental conflict. Such a procedure is more economical, as well as more effective in conserving and promoting health and character growth, than waiting until it is necessary to call in the physician.

II. Cultivate Good Habits

WE are individuals who live primarily by habit, which satisfies in varying degrees underlying wishes, desires, longings, cravings and impulses, rather than by knowledge, straight thinking or even standards of right and wrong. It is, therefore, highly important that we take careful stock of our habits in our ways of living, inquire into the underlying motives, goals or purposes and the satisfactions derived therefrom, and see in what ways a more sensible set of habit patterns needs to be developed to meet new growth, social and other factors. These, however, can only be made of importance when they are actually experienced with a feeling of satisfaction and thus woven into our growing personality fabric.

III. Remove Unnecessary Stress and Strain

BECOME so wholesomely character conscious that you are habitually on the alert to recognize early factors of stress and strain interfering with happy and efficient adjustment to life. These may be physical defects, emotional conflicts and mental kinks, or social and environmental unhealthful conditions. Although a varying amount of stress and strain in modern civilization is relatively unmodifiable and must be frankly accepted, yet it is the unnecessary and excessive tension that eventually wears on one's mental poise and paves the way for ill health.

IV. Face and Frankly Accept Reality

CULTIVATE a sense of reality which prompts you willingly to face the facts as they are and cope with them to the best of your ability. We need to live in the here and now, attending to the problems and opportunities as they arise without crossing bridges before getting to them, without evasion, or acting like an ostrich.

V. Plan a Daily Schedule of Activities

CRITICALLY prepare a well-balanced program of work, play, relaxation, sleep, diet and recreation. While we should make the most of our opportunities rather than be slaves to any program, yet a schedule respecting important health needs will prevent unfortunate mismanagement or sidetracking from important goals and purposes.

VI. Ambition Should Contribute to Doing

AMBITION and imagination are valuable tools to human progress but must not take us beyond what can be accomplished with reasonable effort in terms of actual doing. Much maladjustment and unhappiness arise from too great a breach between what craving and impulse dictate rather than what well-controlled emotion would indicate in realizing our wants. These latter must be distinguished from social obligations.

VII. Live in Terms of We

WE are no longer a nation in the pioneer development when we could live to ourselves with advantage. Social planning is the outstanding need of today. We must therefore learn to forego selfish desires or immediate forms of gratification whenever the present or future welfare of the group is concerned. Reaching out after the opinion of our best judges and friends will assist us in avoiding unnecessary blundering as well as in bringing about better rounded points of view.

VIII. Cherish a Sense of Humor

CHERISH and cultivate a wholesome sense of humor. It will assist us in meeting many trying situations.

IX. Know Yourself, Accept Yourself, Be Yourself, Improve Yourself

MAKE a sincere effort to know yourself better, as well as those with whom you daily rub elbows. Be willing to accept your weaknesses, which can not be changed, but make an effort to improve yourself through working upon your strengths and opportunities rather

than harping upon shortcomings and "spilled milk." Cultivate your powers for discovering and enlarging upon new interests as well as enriching worthwhile old ones. With the growing opportunities for leisure time, more careful thought should be given to satisfying pastimes, worthwhile friendships and habits of relaxation which contribute toward mental poise. Moreover, we need a sound and growing philosophy of life. This should first pay respect to common sense, the moral values, citizenship and ideals which help us to realize better living in the here and now. These should be actively cultivated if we would develop strength of character. Happy, efficient and socially useful character growth to the best of our ability should be our full-fledged aim in life.

References

1. Howard, F. E. and Patry, F. L.: *Mental Health: Its Principles and Practice.* Harpers, New York, 1935.
2. Patry, F. L.: *Outlines of Personality Analysis and Reconstruction.* National Child Welfare Assn., New York, 1935.

214 STATE STREET.

PICROTOXIN IN BARBITURATE POISONING

EDWARD M. KLINE, EDWARD BIGG and H. A. K. WHITNEY, Ann Arbor, Mich. *(Journal A. M. A.*, July 31, 1937*)*, before evaluating the therapeutic response to picrotoxin in their case of barbiturate poisoning, consider (1) the degree of poisoning, (2) the part played by the several other therapeutic measures and (3) the probabilities of recovery had not picrotoxin been employed. The 3 Gm. of amytal ingested by the patient is, according to Sollmann, within the fatal dose range. He considers from 2 to 3 Gm. as the amount usually fatal for man. This fact, coupled with the clinical picture of low blood pressure and absence of all reflexes, indicates that poisoning was severe. When many therapeutic measures are carried out concomitantly it is difficult to evaluate the effectiveness of any one. Other than picrotoxin, the significant procedures employed were strychnine, gastric lavage and intravenous dextrose. Shock and prevention of dehydration were their indications for the administration of intravenous fluids. This, they feel, is an essential principle in the management of all poisonings. Some workers are of the opinion that intravenous fluids are of value as a vehicle in hastening the excretion of barbituric acid, while others maintain that its efficacy lies solely in its supportive nature. The importance of picrotoxin in the treatment of this patient must be weighed carefully, as recoveries do occur in severe cases when nothing more than general supportive measures are employed. Although it is impossible to conclude that the use of picrotoxin was a life-saving measure, the authors definitely feel that the recovery time was shortened. It should be emphasized that the use of picrotoxin is still in the experimental stage and that universal use must await further reports of its clinical application.

INFANT MORTALITY

HERMAN N. BUNDESEN, WILLIAM I. FISHBEIN, O. A. DAHMS and EDITH L. POTTER, Chicago *(Journal A. M. A.*, July 31, 1937), believe that many of the causes of neonatal deaths, as stated on the death certificates, are incorrect, because of incorrect diagnosis. The use of the International List and the Manual of Joint Causes in classifying causes of deaths is misleading in many cases. The rules of the official classification result in many deaths being classified as due to prematurity when they are actually due to other causes.

THE STUTTER-TYPE CHILD

According to JAMES SONNETT GREENE, New York *(Journal A. M. A.*, July 17, 1937), an analysis of 2,203 patients in 1936 applying for treatment at the Medical-Social Clinic showed that about 50 per cent suffered from dysphemia (stuttering) and that the rest suffered from various forms of voice and articulatory conditions.

Economics

Department Edited by Thomas A. McGoldrick, M.D., LL.D.

THE PURRING OF A POSSIBLE CYCLONE

DR. A. C. HANSEN, writing in the syndicated *Bulletins* of some of the County Societies of the country, makes a very shrewd criticism of the argument of the uplifters to the effect that under the present method of practice—which might be called commercialized medicine as contrasted with socialized medicine—the patient knows it is to the doctor's financial interest to make more calls than necessary. The doctor may be too high-minded to do such a thing, but there is always a lurking suspicion in the mind of the patient. Socialization does away with such an unfortunate incentive. Then the doctor and the patient can be real friends . . . In every way socialized medicine is desirable—for both doctor and patient. But Doctor Hansen points out that if it is to the financial interest of the doctor to make too many calls on a patient under "commercialized medicine," then it ought to be to his financial interest, also, to make too few calls under "socialized medicine." Logically, under socialized medicine we would have a system equivalent in many ways to the free medical care dispensed by various fraternal organizations, and we know how far short of perfection such care has always been.

These matters will actually be determined by certain social forces. Either the forces that we believe best for society will prevail, or a cockeyed age will enforce a cockeyed medical system. This gives the real clue to many of the obviously foolish proposals and readings of the uplifters and "socialicians," like the one that Doctor Hansen punctured so easily. It doesn't much matter how foolish such proposals and reasonings are if their proponent is the spearhead of tremendous social forces. Doctor Hansen, or any other clear-headed critic, can readily dispose of such arguments as the one adduced, but the question is, how potentially strong is the cyclone that is now only purring under our camp tents?

If it should transpire that the aforesaid forces are loading the dice in question against us, we may expect to hear a lot of nonsense. We can imagine, without much strain, that the same gentlemen in governmental authority who now tell us that they will never do anything to lower the standards of medicine may some day tell us, in conferring upon us the privilege of serving under a federal medical bureaucracy, that the new system is intended to *raise* standards, that foreign practice is no criterion of the American system to be, and that a unique technic will attractively characterize the whole glamorous business.

We are still naively attempting to carry the discussion along on a high plane, just as though no blackjacks were to be seen sticking out of the pockets of the gentlemen who offer the ill-starred proposals, for use when the impatiently awaited time comes.

—A. C. J.

Cancer

Charles William Herrington, B.S. (Rochester), M.D. (Hopkins), F.A.C.S., *German Literature Editor*, and Umberto Cimildoro, A.B. (Cornell), M.D. (Rome), *Italian Literature Editor*.

Department Edited by
John M. Swan,
M.D. (Pennsylvania), F.A.C.P.
EXECUTIVE SECRETARY, NEW YORK STATE COMMITTEE OF THE AMERICAN SOCIETY FOR THE CONTROL OF CANCER

CLINICAL STUDIES IN *Cancer*

The Cancer Material Observed in a Small General Hospital in 1928.

1.—Cases of suspected cancer, which proved to be not cancerous.

JOHN M. SWAN, M.D., F.A.C.P.
Rochester, New York

IN a paper entitled "The Medical Service Available for Cancer Patients in the United States and Suggestions for its Improvement," Ewing, Greenough and Gerster (4) make the statement that in Europe there is agreement that improvement in cancer service must precede any substantial progress in cancer control. The authors further state that the treatment of cancer cannot be wisely intrusted to the general physician or surgeon, or to the general hospital as ordinarily equipped; but must be recognized as a specialty, requiring special training, equipment, and experience in all arms of the service. Before that paper was published I had been studying the cancer material admitted to the Park Avenue Hospital. I had prepared a summary of the work done in that hospital in 1928 which I presented at a meeting of the staff in January, 1929.

The cancer material here analyzed was treated in the hospital by twenty-one different surgeons. The permission of these surgeons to use the data accumulated by them for this study is acknowledged with thanks.

During the year 1928, 1818 patients were admitted to the hospital, of which 39 were cases of cancer and suspected cancer, or 2.14% of the admissions. Of these, eight proved not to be cancer; one case of chronic cystic mastitis, one of gastric ulcer, two of intracanalicular fibroadenoma of the breast, one of fibroadenoma of the breast, one of acute appendicitis, one of chronic appendicitis, and one of acute hemorrhagic hepatitis. This leaves 31 cases of cancer. Of these, six died in the hospital and six died at home before December 31, 1928, a primary mortality of 38.7%.

The 31 cases of cancer were distributed as follows: Breast, 10; uterus, 7; ovary, 2; stomach, 2; stomach and liver, 1; intestines and peritoneum, 1; pancreas, 2; bladder, 2; hypernephroma, 2; sarcoma of the axilla, 1; tumor of the mesentery, 1.

Case Number 15,330

Female, aged 57 years. Admitted March 27, 1927.

ADMITTING DIAGNOSIS: Probable carcinoma of the stomach.

HISTORY: Symptoms of gastric ulcer for 20 years, with 3 attacks of hematemesis.

PHYSICAL EXAMINATION: Slight epigastric rigidity, no mass palpable.

BLOOD: Chloroanemia (Color index, 0.79).

X-RAY: Lesion in the mid third of the stomach causing hour-glass contraction. Either a deformity from old ulcer or ulcer that is undergoing malignant change. The lesion measures 2.5 cm. in diameter on the X-ray plate.

PROGRESS: While in the hospital the patient had 3 attacks of hematemesis. Weight, 126 pounds. After 55 days' treatment discharged unimproved.

READMITTED: Case number 16,818. January 8, 1928.

HISTORY: After discharge from this hospital the patient went to another hospital, where a celiotomy was done and adhesions between the gallbladder and the stomach were released. Discharged two weeks after the operation.

PHYSICAL EXAMINATION: Tenderness in the epigastrium. No mass felt.

OPERATION: January 9, 1928. Gas and ether anesthesia. Large saddle-shaped ulcer on the lesser curvature of the stomach at the junction of the upper and middle thirds of the organ. The crater seemed perforated and attached to the pancreas with sufficient adhesions to prevent drainage into the abdominal cavity. Ulcer dissected out.

HISTOLOGY: Gastric ulcer with a large amount of inflammatory reaction.

PROGRESS: Postoperative hematemesis 5 times. Discharged convalescent 35 days after admission.

On August 17, 1937, the surgeon reported that in July this patient had an attack of indigestion, the first since her operation, which was relieved by rest and simple remedies. She is now 66 years of age.

FINAL DIAGNOSIS: Gastric ulcer.

COMMENT: This patient, with a clinical history pointing to gastric ulcer of twenty years duration, should have been operated on at the first admission in 1927. Operation was advised but refused. In view of the observations of MacCarty and others (1, 2, 3) which tend to show that gastric ulcers larger than 2.4 cm. in diameter are rare, this lesion might very well have been carcinomatous at that time. Surely the operation done in another hospital should not have stopped with the liberation of adhesions. After the resection of the ulcer in 1928 a section was sent to Dr. MacCarty who agreed with the hospital pathologist in the diagnosis of noncancerous gastric ulcer. The patient was very fortunate that carcinomatous change had not already begun. This case is an example of the average progress of gastric disease. The patient neglected herself and was neglected by the physicians whom she consulted for twenty years. It was more by good luck than by good management that the ulcer had not undergone carcinomatous degeneration. Usually when a patient with carcinoma of the stomach finally reaches the surgeon the disease is of such long duration that metastases render surgery powerless for cure.

Case Number 17,177

Female, aged 71 years. Admitted March 22, 1928.

ADMITTING DIAGNOSIS: Carcinoma of the Cecum.

HISTORY: Many years ago had an attack of dysentery. Four days ago was constipated and, following a cathartic, had pain and constant soreness in the right lower abdomen.

PHYSICAL EXAMINATION: Rigidity in right lower quadrant; tender mass in the McBurney area, and the tenderness radiates into the right flank. Liver not large; no tenderness in the gallbladder region.

PELVIC EXAMINATION: Negative.

BLOOD: Slight leukocytosis (12,900) 81 per cent polymorphonuclear neutrophiles (10,449 per cubic millimeter).

URINE: Albumin and pus.

OPERATION: March 22, 1928. Omentum wrapped around a hard cancerous area in the anterior surface of the cecum. No glands. Excision of cecum and intestinal anastomosis.

HISTOLOGY: Acute appendicitis, inflammatory tissue.

PROGRESS: Pain, noisy, nausea, retention of urine; no fever. Pulse varied from 70-90; respirations, from 18-20. Discharged convalescent 17 days after operation. The surgeon reports that in August, 1937, this patient is alive and without symptoms. She is now in her 81st year.

FINAL DIAGNOSIS: Acute appendicitis.

Case Number 17,950

Female, aged 35 years. Admitted August 22, 1928.

ADMITTING DIAGNOSIS: Tumor of the breast (left).

HISTORY: Lump for five years gradually getting larger; at present the size of a large egg; no pain. Patient has a goiter.

PHYSICAL EXAMINATION: Freely movable mass about the size of a large egg in the left breast.

URINE: Few pus cells.

OPERATION: August 23, removal of mass from the left breast, encapsulated, not attached to the skin.

HISTOLOGY: Fibroadenoma of the breast. (Figure I).

PROGRESS: Postoperative fever to 100; nausea and vomiting. Discharged convalescent 7 days after operation. In 1932 the surgeon reported that this patient was living although she was not in very good health. Her complaints had no connection, in his opinion, with the tumor. Since then there has been no response to the follow up.

FINAL DIAGNOSIS: Fibroadenoma of the breast.

Case Number 17,660

Female, aged 49 years. Admitted June 25, 1928.

ADMITTING DIAGNOSIS: Tumor of breast.

HISTORY: Lump in the left breast noticed one week ago, not adherent, not painful.

PHYSICAL EXAMINATION: Round elastic mass 1½ inches in diameter occupying the central portion of the left breast.

URINE: Albumin and pus.

OPERATION: June 27th. Excision of tumor.

HISTOLOGY: Chronic cystic mastitis.

PROGRESS: Postoperative fever to 99.4°. Uneventful recovery. Discharged convalescent two days after the operation. The patient is living and there was no evidence of breast disease in August, 1937.

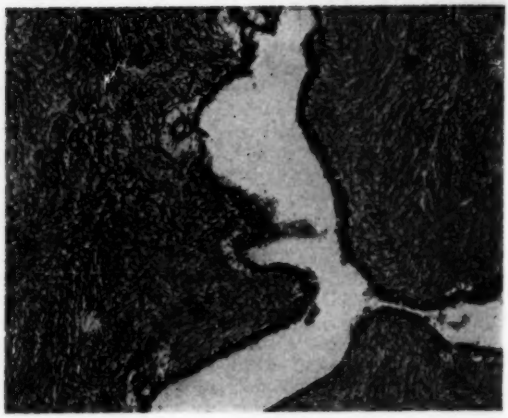


FIG. 1

Case Number 17,950 Fibroadenoma of the Breast. The section passes through a dilated duct, in which there is no evidence of proliferation of the epithelial lining.

Case Number 17,403

Female, aged 47 years. Admitted May 3, 1928.

ADMITTING DIAGNOSIS: Breast tumor.

HISTORY: 15 years ago had a lump removed from the left breast by a surgeon in Buffalo. Has had a lump in the right breast, about the size of a walnut, for a little over a month. The lump is above the nipple, has been increasing in size, and is not painful. No axillary, supraclavicular or infraclavicular metastasis.

PHYSICAL EXAMINATION: Lump the size of a walnut in the upper portion of the right breast, nonadherent, freely movable, no retraction of the nipple.

OPERATION: Tumor removed.

HISTOLOGY: Intracanalicular fibroadenoma.

PROGRESS: Moderate postoperative nausea and vomiting. Discharged improved next day. This patient has left Rochester. Her surgeon reports that he knows that she is living, in good health and has had no subsequent tumor development.

FINAL DIAGNOSIS: Intracanalicular fibroadenoma.

Case Number 18,424

Female, aged 37 years. Admitted December 7, 1928.

ADMITTING DIAGNOSIS: Carcinoma of the breast.

HISTORY: In November had an attack of pain in the hip, and while in bed noticed a nodular lump in the right breast.

PHYSICAL EXAMINATION: Nodular lump in the upper portion of the right breast, 1 by 1¼ inches in diameter. Freely movable.

URINE: Contained albumin and pus.

OPERATION: December 8th, mammectomy; one small gland removed from the axilla.

HISTOLOGY: Intracanalicular fibroadenoma. (PAH) Adenofibroma (Buffalo).

PROGRESS: Some postoperative nausea and vomiting. Fever to 100.6°; pulse to 140. Discharged convalescent eleven days after operation. Since the death of the attending surgeon this patient has been lost sight of.

FINAL DIAGNOSIS: Intracanalicular fibroadenoma.

COMMENT: These four cases, operated on within from one week to five years of the discovery of breast tumors, fortunately prove to be benign. Of course, it would have been better for those women who waited longer than one week if they had sought surgical advice more promptly after the discovery of the lesions.

There is some difference of opinion among pathologists as to the character of intracanalicular fibroadenoma of the breast. Dr. James Ewing was asked to give us his opinion on this question. He was also asked if, in his opinion, such a tumor, provided he considered it benign, had a greater tendency than other benign tumors to become malignant. He replied: "Intracanalicular fibroadenoma of the breast is a benign tumor. It is not more likely than any other tumor to undergo malignant change; but this does occur rarely."

Case Number 17,478

Female, aged 43 years. Admitted May 16, 1928.

ADMITTING DIAGNOSIS: Carcinoma of the stomach, gallbladder and thyroid body.

HISTORY: Twelve weeks ago had been under treatment of a physician for goiter and complained of "cold." After that her color became anemic and she complained of weakness.

PHYSICAL EXAMINATION: Jaundice, emaciation, prominent goiter, consolidation base of right lung, irregular heart, no murmurs, liver enlarged, smooth, mass in pyloric region.

PROGRESS: Fever to 100°, nausea and vomiting, hiccough, restlessness, thready pulse, suppression of urine, and death seventeen hours after admission.

AUTOPSY: Bronzing of skin, fibrous and cystic thyroid body, acute hemorrhagic hepatitis, fibroma of uterus, chronic interstitial nephritis, chronic praenchymatous nephritis. Permission to examine thoracic contents refused.

HISTOLOGICAL DIAGNOSIS: Chronic fibrous interstitial nephritis, acute parenchymatous nephritis, fibrous thyroid with hyaline degeneration and atrophy of acini and cells. Acute hemorrhagic hepatitis.

CAUSE OF DEATH: Acute hemorrhagic hepatitis following an acute infectious process of unknown character.

FINAL DIAGNOSIS: Acute hemorrhage hepatitis.

Case Number 18,307

Female aged 78 years. Admitted September 9. 1928.

ADMITTING DIAGNOSIS: Carcinoma of the cecum.

HISTORY: Indefinite abdominal symptoms for several days. Vomited once. Abdominal pain, fever to 101°; similar attack 18 months before.

PHYSICAL EXAMINATION: Mass in the right iliac fossa, thought to be acute appendicitis, but malignancy was considered.

URINE: Albumin, pus and blood.

OPERATION: November 9, 1928. Exploratory. Inoperable carcinoma of the cecum. Large mass involving the cecum and mesentery, with mesenteric glands and loops of small intestine grown fast to the primary tumor. Free blood-tinged fluid in the abdominal cavity.

HISTOLOGY: None.

PROGRESS: Cough, suppression of urine; abdominal pain; confused and restless; stomatitis; edema; fever to 102° on the 2d day after operation. Dis-

charged eight days after operation. This patient was alive and apparently well January 2, 1929. On December 17, 1930, her physician reported that she was alive and quite active for her age. She had some pain in the region of the growth. She died September 23, 1932. There was a partial autopsy, which showed that the pathological condition in the abdomen was in the nature of a chronic inflammatory process, evidently originating in the appendix and not carcinoma at all.

FINAL DIAGNOSIS: Chronic appendicitis.

COMMENT: At the time of the patient's discharge the following comment was made: "It is too bad that an involved lymphnode was not removed at operation. The condition may be inflammatory. If the surgeon had been a little more courageous and gone into the mass, might he not have found the real pathological process in 1928? Perhaps the decision not to proceed was wise in a patient 78 years of age at the time of operation and 82 at death."

References

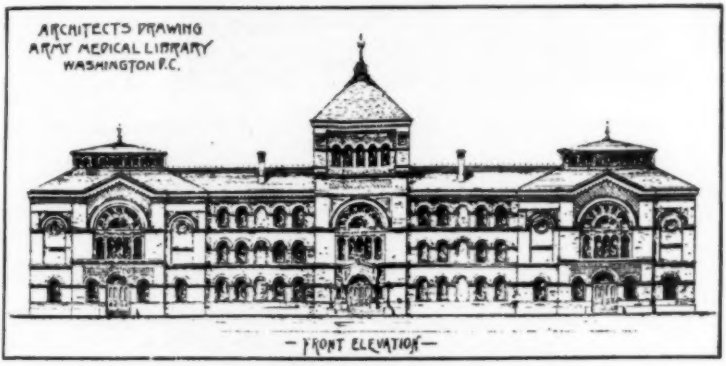
1.—William Carpenter MacCarty. Jour. Cancer Research. March, 1928. 12:1.
2.—William Carpenter MacCarty and Albert Compton Broders. Arch. Int. Med., February, 1914. 13:208.
3.—Walter C. Alvarez and William Carpenter MacCarty. Jour. Amer. Med. Assn., July 28, 1928. 91:226.
4.—James Ewing, Robert B. Greenough and John C. A. Gerster. Report made to the American Society for the Control of Cancer, 1928.

CONTROL OF SYPHILIS

THOMAS PARRAN, Washington D. C. (*Journal A. M. A.*, July 17, 1937), believes that in a country as diverse as this, no one stock plan of syphilis control is applicable. In each state and in each city the problem needs to be studied and a plan of action developed to meet particular local needs. Certain basic principles, however, have general application. These principles may be summarized briefly as follows: 1. There should be a trained public health staff to deal with syphilis in each state and city. 2. Minimal state laws should require reporting of cases, follow up of delinquents, and the finding of sources of infection and contacts. 3. Premarital medical certificates, including serodiagnostic tests, should be a legal requirement. 4. Diagnostic services should be freely available to every physician without charge and should meet minimal state standards of performance. 5. Treatment facilities should be of good quality, with convenient hours and location. Wherever possible the clinic service should be a part of an existing hospital dispensary. Hospital beds should be provided for patients needing bed care. 6. The states should distribute antisyphilitic drugs to physicians for the treatment of all patients. 7. Routine serodiagnostic tests need to be used much more widely. In particular, every pregnancy, every hospital admission, every complete physical examination should include this test. 8. The informative program in modern diagnosis, treatment and control should be prosecuted vigorously among physicians and health officers, especially through the use of trained consultants. 9. The public educational program must be persistent, intensive, and aimed especially at those individuals in the age groups in which syphilis is most frequently acquired. If these principles are applied to meet varying local conditions, no one can doubt that the shadow of syphilis will be lifted from the land. The object of the Public Health Service in fighting syphilis is identical with the historic objective of the medical profession. It is not to make industry more efficient, though it is hoped that it will. It is not to save Americans money, though success will save them very much. It is not to make any one more comfortable and contented, though syphilis causes much discomfort and discontent. It is to make the lives of Americans more healthful and more secure.

Cultural Medicine

SOME OF THE GREAT MEDICAL LIBRARIES OF THE UNITED STATES



1. The Army Medical Library

The Army Medical Library is the literary power house of the profession, a super-TVA wherefrom flow currents which continuously recharge the intellectual batteries that "service" every hospital, every medical group, every medical publication, and every community in the land in need of a high order of medical care—and what community does not need such care?

—Charles Frankenberger, Librarian Medical Society of the County of Kings, Brooklyn, N. Y., in editorial MEDICAL TIMES 64-510 (Dec.) 1936.

THE Army Medical Library celebrated its Centenary on November 16, 1936.

Founded by Surgeon General Joseph Lovell in 1836, and serving him merely as a small collection of reference books, the Library languished until 1865, when the immortal John Shaw Billings undertook to make it grow. In 1868 left-over funds from Civil War hospitals enabled Billings to expedite the growth already initiated by him. The record runs as follows:

1840	228	volumes
1861	3400	"
1864	1365	"
1865	2258	(Billings takes charge)
1868	6066	"
1876	40000	"
1883	70000	"
1895	308445	"
1936	394003	(also 558,616 pamphlets)

From 1865 to 1887 the Army Medical Library and Museum occupied the old

From the Editorial Research Department of the MEDICAL TIMES.

Acknowledgments for data and illustrations are due to Colonel Harold W. Jones (Medical Corps, United States Army), Librarian of the Army Medical Library, to the *Military Surgeon*, and to the *Army Medical Bulletin*.

The Largest Medical Library in the World.

The Army Medical Library, 7th St. and Independence Ave. S. W., Washington, D. C. The building, erected in 1887, contains the collection of more than a million items.

Ford's Theater, a fire trap which had witnessed the assassination of President Lincoln. In 1887 a new building was erected with funds amounting to two hundred thousand dollars, obtained by Billings from Congress.

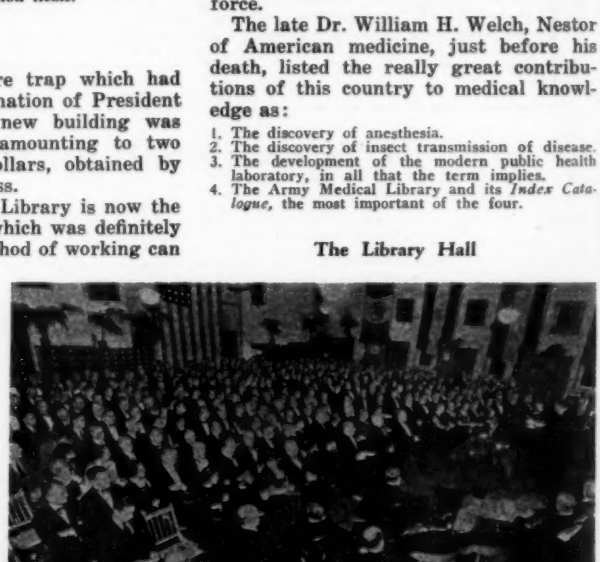
The Army Medical Library is now the largest of its kind—which was definitely Billings' aim. His method of working can be best expressed by a response he once made to a compliment on his success: "I'll let you into a secret—there's nothing really difficult if you only *begin*—some people contemplate a task until it looms so big, it seems impossible, but I *just begin* and it gets done somehow. There would be no coral islands if the first bug sat down and began to wonder how the job was to be done."

An important thing to remember is the fact that the Army Medical Library, while not the first library in the United States, directly or indirectly stimulated the establishment of scores of medical libraries in other cities. Its starting was as vital for modern medicine as was the founding of the medieval universities for European learning and progress. There were schools in Europe before the blossoming of Bologna, but the Greek spirit, carried over in time by the Arabians, was not then in them. In like manner, the Army Medical Library became a greatly needed force.

The late Dr. William H. Welch, Nestor of American medicine, just before his death, listed the really great contributions of this country to medical knowledge as:

1. The discovery of anesthesia.
2. The discovery of insect transmission of disease.
3. The development of the modern public health laboratory, in all that the term implies.
4. The Army Medical Library and its *Index Catalogue*, the most important of the four.

The Library Hall



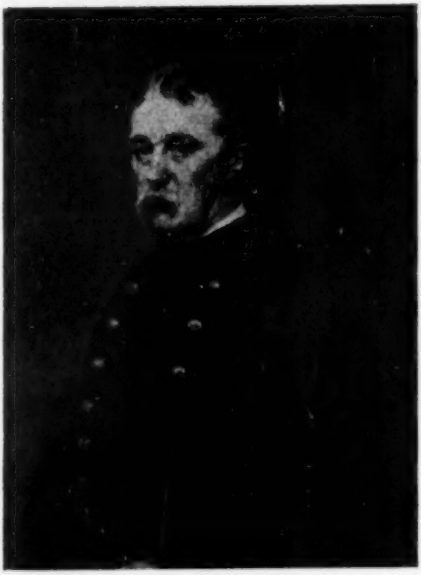
In 1921 Welch had written:

I question whether America has made any larger contribution to medicine than in building up and developing the Surgeon-General's Library and in the publication of the *Index Catalogue* and the *Index Medicus*.

The Library's great *Index Catalogue*, with double entry of author and subject, is of Gargantuan character. It is "the most exhaustive medical bibliography ever undertaken." Billings published the sixteen volumes of the first series from 1880 to 1895; the second series of twenty-one volumes from 1896 to 1916; the third series of ten volumes from 1918 to 1932. A fourth series is now, after several years delay, in course of production.

The "*Index Medicus*" was never an official government publication. From 1903 until 1927 it was published by and with the support of the Carnegie Institution of Washington. In 1927 it consolidated with the "*Quarterly Cumulative Index to Current Medical Literature*" (published since 1916 by the A.M.A.), forming the present "*Quarterly Cumulative Index Medicus*" published by the American Medical Association. For a few years, at the beginning of the consolidated publication, the Carnegie Institution of Washington continued to provide some support.

Because it is the "Army" Medical Library, it does not mean that it is specifically for the use of Army officers. It is a national medical library available to the entire medical profession through interlibrary loan arrangements. Publications that are loanable can be borrowed by physicians upon application made through a responsible medical library.



Colonel John Shaw Billings, M.D., LL.D., D.C.L. (1838-1913)

Father of the Army Medical Library

Portrait by Cecilia Beaux presented to the Library by 260 physicians of America and Britain. Among the American subscribers were Chadwick, Bowditch, Fitz, Guiteras, Hare, de Schweinitz, Da Costa, Darrach, Dyer, Hurd, Halsted, Jacobi, Janaway, Kelly, Keen, Lewis, Lusk, Mitchell, Musser, McBurney, McGuire, Matas, Sayer, Shattuck, Starr and Welch. Among the British donors were Lord Lister, Acland, Broadbent, Ferrier, Flower, Horsley, Humphreys, Little, Paget, Power, Russell, Osler, Reynolds,

It is to Billings that we owe the splendid cataloging of all that great stream of contributions that marks the most prolific and significent era in modern medicine. He was the Father of the Library and bred the faithful and gifted stewards who worked with or followed him—Fletcher, Father of the *Index Medicus*, Garrison, author of that incomparable work, An Introduction to the History of Medicine, Hume, leader in the movement for a modern building, and Jones, the present Librarian who is so brilliantly discharging the responsibility of the office and planning the great destiny of his charge.

The Army Medical Library and its *Index Catalogue* belong to medicine, and when we said the "immortal Billings" we were not indulging in hyperbole. All medical posterity will hold itself indebted to him for giving it a tool—"America's greatest gift to medicine," in the words of Adami—which it will use daily as long as civilization lasts, and without which it would

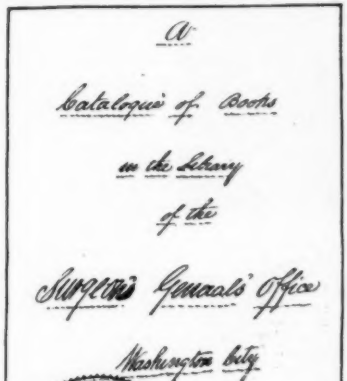
be unable to build surely and rapidly unto the still nobler structure of the years to come. Who could wish for a higher place in the medical scheme of things?

Awarded by the Royal College of Surgeons of England to Dr. Robert Fletcher as Principal Assistant Librarian of the Army Medical Library, 1910. His name is engraved around the rim.

This medal is one of the most highly prized awards for distinguished medical achievement. In a century it was awarded only eleven times. The recipients were: James Parkinson (18822); Joseph Swan (1823); George Bennett (1834); William Lodewyk Crowther (1869), Thomas Bevill Peacock (1876), Richard Owen (1883), Sir W. J. Erasmus Wilson (1884), Sir James Paget, Bart. (1897), Lord Lister (1897), Sir Richard Havelock Charles (1906), Robert Fletcher (1910).

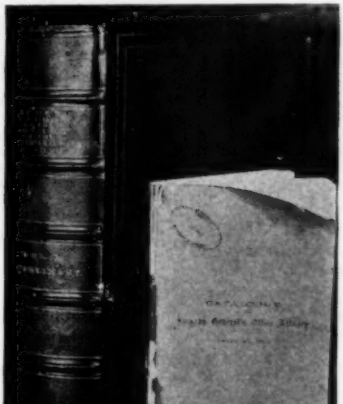
Title Page of First Catalogue of the Army Medical Library, 1840.

Manuscript of 23 unnumbered leaves, listing 130 titles. The library now has more than a million titles.



The Catalogue of 1865.

Twenty-four pages, compared with the first volume of the Index Catalogue.



Miscellany

OXYGEN MASKS FOR CONGRESS

IF the Bills oxygen mask protects mental workers from fatigue caused by thinking, why might it not be put to other uses?

The mask delivers to the breather a combination of about 50 per cent pure oxygen mixed with air. Its use was described by Dr. Arthur G. Bills of the University of Cincinnati at the recent meeting of the American Physchological Association.

If the effect of oxygen used in this way is to facilitate high-power brain work, why might it not improve cerebral mechanisms in the mentally backward?

We are not thinking merely about mentally defective children.

Why not supply Congress with these masks?

WHITE MAN'S "MAGIC"

Special Cable to THE NEW YORK TIMES

Darwin, Australia, Aug. 4—Aspirin and common sense imparted daily in strong doses cured a native couple of "devil-devil."

When the couple fell ill they consulted a witch doctor, who told them they were victims of "bone-pointing" The aborigines believed that an enemy can decree death simply by pointing a bone at the person he desires to dispatch. The belief in this superstition is so profound that natives often sicken and die once they are told they are victoms of a bone-pointer.

Dr. Robert Fletcher
(1823-1912)

Principal Assistant Librarian Army Medical Library. Father of the Index Medicus.

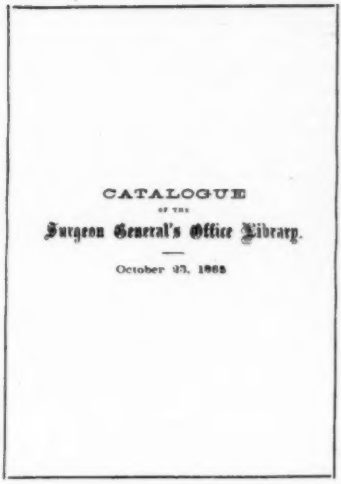
Fortunately, this native couple went to say farewell to a white woman employer, who declared she was ashamed of their foolishness and began to give them aspirin, which, she told them, was the white man's magic cure for any ill. The wasted black pair soon felt better, and eventually they vowed that black man's magic had gone from their lives. Now they are working happily again.

TRACING OF SYPHILIS THROUGH COMMON AILMENTS

A. BENSON CANNON, New York *(Journal A. M. A.*, July 31, 1937), points out that the present study was originally conceived as part of a larger one dealing with the accomplishments of arsphenamine in the treatment of syphilis of all stages. For this purpose a systematic record was kept of all adult patients admitted to the department of dermatology from the spring of 1935 to the spring of 1937 whose ultimate diagnosis was syphilis. In the course of this study it became increasingly apparent that a large proportion of the patients so admitted arrived in this department by accident rather than by design, having presented themselves originally for some complaint totally unconnected with syphilis—at least in their own minds and frequently also in the opinion of the admitting physician. The approximately 600 cases of syphilis recorded to date are unselected, then as regards latency and represent all this period. It leaves out of account those who received only intramuscular injections and/or silver arsphenamine, Among these 600 cases there were 300-odd admissions in whom active syphilis was not at first suspected. Not until commonplace injuries failed to heal after weeks or months of treatment by ordinary measures were some of these patients discovered to have a positive Wassermann reaction and some a history of a previous infection, overlooked or passed by as irrelevant to the present complaint. The mystery of the slow healing operative wound—even after the ex-

Col. Harold Wellington Jones
M. C., U. S. Army

The Librarian, Army Medical Library



CATALOGUE

OF THE

Surgeon General's Office Library.

October 25, 1865

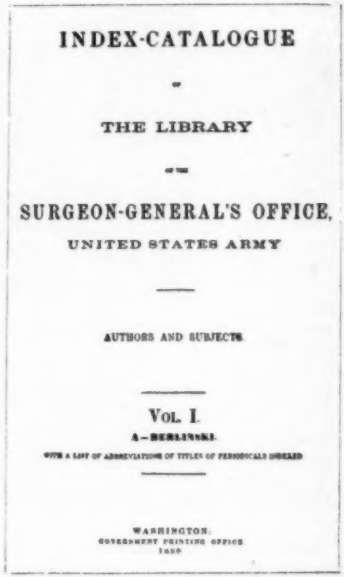
Title page of the first printed catalogue of the Army Medical Library, 1865.

It consists of thirty-two pages measuring 5¾ x 4 inches. From this little pamphlet has grown the mighty INDEX CATALOGUE, now in its forty-ninth royal octavo volume of approximately 1000 pages each.

traction of a tooth—is often solved by the simple procedure of taking a blood test. It was found that a surprisingly large proportion of these patients had presented as their chief complaint some ailment commonly encountered in general practice under the names of gastrointestinal disorders, chronic disorders of the respiratory tract, urinary symptoms, gynecologic ailments and miscellaneous arthritis, diabetes, hernia, goiter and the like. The present report attempts to describe, in a selected group of cases, the methods by which other causes were eliminated, and the symptoms were traced to a syphilis heretofore either unsuspected or supposedly inactive Symptoms which brought patients to the clinic, the diagnostic procedures, including laboratory tests, x-ray examinations and pathologic changes, the evidence for syphilis and the treatment and its results are described by the author in the hope that this approach, by symptoms rather than systems (the usual textbook method), may prove of considerable interest and some practical value.

ANTEPARTUM CARE

ABRAHAM B. TAMIS and JACOB CLAHR, New York (*Journal A. M. A.*, July 17, 1937), state that between Feb. 1, 1934 and Jan. 31, 1935, 1,009 patients registered in the antepartum clinic of the Morrisania City Hospital. A record was kept of the time of registration, number and frequency of clinic visits, and of any and all abnormalities. Following the delivery, the charts of both mother and baby were reviewed. Notations were made concerning the type and duration of labor, condition of the baby, and the clinical course of the mother during the immediate puerperium. Despite the gratuitous nature of this service, not one patient applied for antepartum care before the sixth month of gestation.



INDEX-CATALOGUE

OF THE

THE LIBRARY

OF THE

SURGEON-GENERAL'S OFFICE,

UNITED STATES ARMY

AUTHORS AND SUBJECTS

VOL. I.

A—BERLINSKI.

WITH A LIST OF ABBREVIATIONS OF TITLES OF PERIODICALS INDEXED

WASHINGTON:
GOVERNMENT PRINTING OFFICE
1880

Title page of the first volume of the Index Catalogue of the Library of the Surgeon General's Office.

The first series, sixteen volumes, appeared 1880-1895. The second series, twenty-one volumes, appeared 1896-1916. The third series, ten volumes, 1918-1932. Volumes one and two of the fourth series have been issued. The Index Catalogue is the most comprehensive piece of bibliography ever attempted in any field of knowledge.

Contemporary Progress

+ Medicine +

Ferrous Gluconate in the Treatment of Hypochromic Anemia

P. REZNIKOFF and W. F. GOEBEL (*Journal of Clinical Investigation, 16: 547, July, 1937*) note that while it is universally recognized that hypochromic anemia due to iron deficiency should be treated by the administration of iron, "there is not as much unanimity with respect to the particular type of iron compound to be used." Many patients do not tolerate the usual iron compounds well, and complain of such symptoms as nausea, epigastric discomfort, diarrhea or constipation when taking iron for any length of time. This is particularly undesirable in patients in whom the anemia is associated with a gastro-intestinal lesion such as peptic ulcer or colitis. Most ferrous compounds are readily oxidized to the ferric state, and one of the characteristics of the ferric compounds is that they precipitate proteins. This may account for their irritating action on the gastro-intestinal tract of some patients. The authors have previously reported the use of ferrous gluconate experimentally in the treatment of hypochromic anemia in rats. They found that this iron compound did not precipitate proteins even when converted into the ferric state. They have accordingly modified and simplified their method for the preparation of ferrous gluconate and employed this compound in the treatment of hypochromic anemia in 13 cases. In 8 cases the ferrous gluconate was given by mouth, in 2 cases by intramuscular injection and in 3 cases by both methods. The anemia in all these patients responded well to the treatment; the results in reticulocyte response, utilization of iron, and daily increase in hemoglobin compared favorably with results obtained with other iron compounds in similar cases. Four of the patients, who had shown toxic reactions to other iron compounds, were able to take ferrous gluconate "without undue distress." The intramuscular administration of ferrous gluconate caused only rare and mild local reactions and no systemic reactions. But since the oral administration of ferrous gluconate was effective in most cases and was well tolerated, the authors believe that its parenteral administration would not be frequently indicated.

COMMENT

Heath has repeatedly shown that parenteral use of iron is not necessary. Personally, I have found ferrous sulphate tablets, three

grains each, so satisfactory and so inexpensive that I can see no need of any other form of iron. If these are made with dextrose they are thought to be less disturbing. I have not seen any digestive upsets from ferrous sulphate even in peptic ulcer, gastric carcinoma or in children. An occasional patient must build up the dosage, beginning with one or two tablets a day and gradually increasing the dose. There is no constipating effect from this form of iron. If the patient needs iron and cannot take it by mouth, one can use iron cacodylate intravenously. Since more and more work is being done on the anemias of infancy it will be necessary to have some easy way of administering ferrous sulphate.

M.W.T.

Importance of Soft Tissue Lesions in Arthritis

D. H. KLING (*American Journal of Medical Sciences, 194:257, August 1937*) notes that in the study of arthritis, there is a tendency to overemphasize the importance of the bony changes as shown in the roentgenogram, and not to give sufficient consideration to pathological changes in the soft tissues. Recent studies have shown, however, that the synovial tissues have a "dual structure and function." One of these functions is to bind the articulating bones by means of a connective tissue capsule; the other is the production of synovial fluid by means of special cells in certain areas at the intra-articular surfaces. The function of the synovial fluid is lubrication and protection of the joint surfaces. The author's studies have shown that mucin is present in normal synovial fluids and in most synovial effusions of traumatic or inflammatory origin. Mucin is not a degeneration product but "a product of special cell activity;" and the function of the synovial fluid depends upon its mucin content. The author has made it a practice to aspirate joint effusions in all types of arthritis, and has never seen any untoward effect of this procedure. The systematic study of joint effusions is of definite diagnostic value. A table is presented showing the various tests made on such effusions and their clinical significance. In addition the aspiration of joint effusions is of definite therapeutic value, not only in traumatic arthritis, but in inflammatory arthritis for the relief of distention and the removal of toxic products. In gonorrheal arthritis the repeated aspiration of joint effusions has given especially good results. Careful examination also shows that in many cases of arthritis, symptoms attributed to changes in the joints are in reality due to changes in the peri-articular tissues —such as infiltration of the insertion of tendons or of subcutaneous tissues, atrophy of muscles, tenosynovitis, or hypersensitivity of the subcutaneous fat. The latter occurs especially at the knee or elbow joints of obese women past middle age.

COMMENT

Pemberton's work along these lines is interesting. There seems to be some retention of fluids in the soft tissues in most cases. In one case recently seen by the reviewer a diminution in the intake of alcohol improved the soft tissue swelling. In others, a dosage of 1000 international units of vitamin B daily is indicated. Aspiration of joint effusions may be used for relief of the condition but more study is required as to the etiology.

M.W.T.

Healed Bacterial Endocarditis

LOUIS HAMMAN (*Annals of Internal Medicine, 11:175, July, 1937*) notes that Thayer reporting on 206 cases of subacute bacterial endocarditis from the records of Johns Hopkins Hospital, in 1924, found no instance of recovery from the disease; and no case with recovery has since been reported from that hospital. The author himself has seen no case of "well-established" subacute bacterial endocarditis that recovered. Most clinicians regard this form of endocarditis as uniformly fatal, but Libman has reported at least 3 per cent. recoveries in the usual type of the disease, and "is convinced that many more recoveries occur in mild cases which are often overlooked." Pathological studies, however, indicate that there is a definite tendency to healing in the cardiac lesions of bacterial endocarditis in all but the most acute cases. In some instances there may be active vegetations along the margins of a valve, but dense fibrosis and calcification in other portions indicating healing of previously active lesions. In other cases, the process may be "mildly active" in one valve, while

another valve is scarred and contracted—the remnants of "infection long past;" in still other cases, one or more valves may show scarring and calcification without any evidence of infection remaining. It is evident from these findings that some, perhaps many, cases of bacterial endocarditis are unrecognized; the patients recover and live for several years with the usual symptoms of a valvular defect. The author reports 4 illustrative cases from Johns Hopkins Hospital in which the diagnosis of bacterial endocarditis was not made during life, but in which pathological examination showed typical lesions of bacterial endocarditis in the process of healing or completely healed.

COMMENT

It is interesting to note that there are some cases of bacterial endocarditis in which actual healing takes place.

M.W.T.

Parenteral Liver Extract in the Treatment of Pneumonia

J. A. WILSON and W. C. CAREY (*American Journal of Medical Sciences, 193:752, June, 1937*) note that the senior author (J. A. W.) previously reported 2 cases of streptococcus pneumonia treated by injection of liver extract. Since that time 28 additional cases of pneumonia have been treated by this method, making a total of 30 cases. These include 8 cases of streptococcus pneumonia, one case due to staphylococcus, and the remainder being due to the pneumococcus. The liver extract was given intramuscularly, usually in amounts of 2 to 4 c.c. every six to eight hours. This treatment was used only in cases showing a relatively low, or a falling leucocyte count—an unfavorable prognostic sign in pneumonia. The leucocyte count was above 15,000 in only 8 of these cases when treatment was instituted. All but 6 of the 30 cases responded to treatment with a rise in the leucocyte count. Several of the patients showed a marked increase in urinary output the day after the liver extract injections were given. Five of the 30 patients died, a mortality of 16.7 per cent., which compares favorably with the usual mortality for pneumonia. In one of these cases death was due to pulmonary embolus, developing on the twentieth day when the patient was recovering. The liver extract treatment causes no anaphylactic reactions; there is some pain at the site of injection, but this is of short duration. The treatment is safe, simple and "very economical," and in the authors' experience has proved of definite value in cases where a low or falling leucocyte count indicates an unfavorable prognosis.

COMMENT

Reasonable therapy. Not difficult to execute and causes very little disturbance to a patient who can ill afford to be disturbed. Besides, it gives a good amount of vitamin B.

M.W.T.

The Gastric Secretion in Myelogenous and Lymphatic Leukemia

M. DOBREFF (*Deutsches Archiv für klinische Medizin, 180:382, June 28, 1937*) reports a study of the gastric secretion in 34 cases of leukemia observed in the past five years at the medical clinic of the University of Sofia. Of these 34 cases, 21 were of the myelogenous type and 13 lymphatic leukemia. More than half of the patients with myelogenous leukemia showed anacidity of the gastric secretion; less than one-fourth of those with lymphatic leukemia showed anacidity. Hypoacidity was found in 4.7 per cent of the patients with myelogenous leukemia and in none of those with lymphatic leukemia. The percentage with normal gastric acidity was approximately the same in both groups—38 and 38.4 per cent respectively. None of the patients with myelogenous leukemia showed definite gastric hyperacidity, while 38.4 per cent of the patients with lymphatic leukemia showed hyperacidity. To make the contrast between the two types of leukemia more striking, the author states that 61.8 per cent of the patients with myelogenous leukemia and only 23 per cent of those with lymphatic leukemia showed anacidity + hypoacidity; and 38 per cent of the patients with myelogenous leukemia but 76.8 per cent of those with lymphatic leukemia showed normal acidity + hyperacidity. There is therefore a very definite tendency toward anacidity or low acidity of the gastric secretion

in myelogenous leukemia, and toward hyperacidity in lymphatic leukemia.

COMMENT

Interesting observations.

M.W.T.

+ Surgery +

The Study of Wound Healing

M. R. REID *(Annals of Surgery, 105: 982, June, 1937)* notes that while infection of a wound is always a serious detriment to healing, surgeons should bear in mind that there are other factors in wound healing, and that asepsis and antisepsis alone are not sufficient to promote the satisfactory healing of wounds. The formation of granulation tissue is an essential part of the process of wound healing, and in the absence of "the normal coverings and linings of the body," granulation tissue is the best defense against the invasion of bacteria or toxic substances. In using aseptic and antiseptic procedures care should be taken not to injure the tissues so as to prevent the normal formation of granulation tissue. Every antiseptic solution employed should be studied to determine its possible harm to living cells as against its value in the control of infection. Antiseptics should not be used on the skin "in lieu of careful scrubbing with soap and water." On granulation tissue only the mildest antiseptics should be used and "*only when indicated*" and when they can be applied without traumatization or causing bleeding. On fresh traumatic wounds, the author believes, all known forms of antiseptic drugs or cauterizations do more harm than good. For several years it has been his practice to wash such wounds with normal salt solution both before and after débridement and scrub them with soap and water if necessary to remove ground-in dirt and grease. Wounds so treated have healed "more benignly" and with a lower incidence of infection than wounds treated with antiseptics. The healing of a wound is primarily a problem of tissue growth; dead cells are "helpless" against infection and dead and devitalized tissue should be removed from wounds. The living cells must be stimulated to grow by ensuring a good blood supply to the wound; this may require the addition of certain salts or substances that are lacking in the patient's blood. Little is known about this latter phase of the subject, the author notes, although the value of maintaining the normal fluid balance, and of the addition of glucose, salt solution and normal blood (by transfusion) to the patient's blood stream is already recognized. The temperature of the wound should also be maintained at as near the normal body temperature as possible, as this is the optimum for cell growth.

COMMENT

Here is a sensible appeal for surgeons or students of surgery to respect the tissues, especially granulating tissue in the process of wound healing, and to guard them from every trauma. The protective (from infection) qualities of granulation tissue is emphasized. The author's plea for special care of granulating wounds reminds us of an article published while we were internes entitled "Self-restraint in Surgery," by Lewis A. Stimson. At that time it had grown to be a common practice to dress wounds frequently however perfect the systemic evidence and however free the locus from signs of irritation. Stimson's plea that every time gauze dressings were torn from the wound it deterred healing and infections were encouraged had a large hearing and considerable influence. "A re-emphasis of the principles of wound healing which were established long ago" is always in good order, for the very active and the very young surgeon are both prone to take all this for granted and the quotation from Billroth is perennially wise—'The proper treatment of wounds is to be regarded as the most important requirement for the surgeon'." Later in this article the possible requirements for the correction of aberrations in blood chemistry receive attention—also the temperature requirements for optimum cell growth.

C.H.G.

Artificially Induced Thrombophlebitis; the Problem of Postoperative Pulmonary Embolism

D. H. PATEY *(Surgery, Gynecology and Obstetrics, 64:1002, June, 1937)* notes that there are two types of postoperative thrombosis: (1) That in which the phlebitic element is marked and the signs are "essentially obstructive" such

as swelling of the leg and dilatation of the collateral veins; and (2) that in which the phlebitic element is not marked and often the first sign that a clot is present is evidence of its migration. From a study of the effect of injecting sclerosing solutions in the treatment of varicose veins, the author finds that the phlebitic reaction is most marked when the vein is not ligated above the site of injection and when it becomes markedly dilated; thus the amount of phlebitic reaction is chiefly proportionate to the degree of dilatation in the vein in which thrombosis occurs, rather than to the amount of sclerosing agent injected. In postoperative thrombophlebitis, clinical experience indicates that the phlebitic element "acts as a fixative of the thrombus and therefore as a preventive of pulmonary embolism." Since it seems impossible to prevent the occurrence of postoperative thrombophlebitis altogether, it would seem desirable to ensure the development of the "less virulent local obstructive form rather than the migrating embolic form" by keeping the veins of the lower limbs, where such postoperative emboli usually arise, as dilated as possible. This, the author suggests, can be achieved by raising the head of the bed 6 to 9 inches after operations on adults that are particularly apt to be followed by postoperative embolism, and keeping it raised until convalescence. If the operation has been severe, this should not be done until twelve to twenty-four hours after operation. A hard pillow is placed at the feet and the patient automatically presses against this in order to counteract the tendency to slip down. The resulting tonic action of the muscles probably "more than counterbalances any stasis produced by gravity." At any rate in using this method for the past year, the author has found no serious practical objection. The carrying out of this simple measure on a large scale for the prophylaxis of pulmonary embolism, the author believes, is "a legitimate clinical experiment."

COMMENT

An interesting contribution suggesting simple methods for prevention of postoperative pulmonary embolism based on reasonable physiological conditions. An experimental treatment which seems unlikely to do anyone harm.

C.H.G.

"Liver Deaths" in General Surgery

J. L. De COURCY *(Annals of Surgery, 106:58, July, 1937)* notes that so-called "liver deaths" have been reported chiefly as following operation on the biliary tract. They are characterized by a rapid rise in temperature without any evidence of infection and death within two or three days. A few authors, notably Bryce and his associates at the New Orleans Charity Hospital, have reported "liver deaths" with an exactly similar clinical picture occurring after operations other than on the biliary tract, and even in extensive burns. De Courcy reports 2 cases in which this same type of fatal postoperative complication occurred; in one case a colostomy was done as the first stage of operation for carcinoma of the rectum; in the other, a hysterectomy. In the first case, the temperature rose to 106° F. within twenty-four hours after operation, and in the other to 107° F. Autopsy showed no definite cause of death; microscopic examination of the liver showed fat necrosis. Studies of liver deaths have shown that they are apparently due to a toxemia resulting from additional injury to an already damaged liver caused by the operative procedures. The liver damage which precedes such deaths is not, however, clinically evident. Even tests of liver function may not always reveal it. Liver deaths are more common in biliary tract surgery, because, as is generally recognized, there is usually some damage to the liver in gallbladder disease. However, other factors may cause liver damage in cases in which the biliary tract is not involved. The author notes that in his cases, both patients showed a considerable degree of anemia, and he is of the opinion that diminished blood supply resulting from the anemia was the cause of the pre-operative liver damage. He suggests, therefore, that in surgical patients who show a considerable degree of anemia, glucose solution be given pre-operatively as an adjunct to transfusion, in order to protect the liver from damage and increase its detoxifying action.

COMMENT

What causes the pre-operative damage to the liver when the so-called "liver death" occurs succeeding an operation which does not involve the liver? The author notes that both patients showed a considerable degree of anemia and he is of the opinion that diminished blood supply resulting from the anemia produced the pre-operative liver damage that made this organ so vulnerable to operative shock. His suggestions are reasonable on a physiological basis and should be broadly undertaken and results from many sources published if possible in some central journal office. A broad field of observation of a rare condition could thus be correlated and deductions would be more accurate.

C. H G.

Headache After Spinal Anesthesia

H. KOSTER and his associates at the Crown Heights Hospital, Brooklyn, N. Y. *(Archives of Surgery, 35:148, July, 1937)*, report a study of headache following spinal anesthesia. Spinal anesthesia is used as a routine for all major operations at the author's clinic, and has been employed in approximately 11,000 instances in the past eleven years. It has been found that as many as 100 consecutive patients could be anesthetized by the usual technique without developing postoperative headache, and then the next 4 or 5 patients would have headache without any change in the technique. In the entire series, the incidence of postoperative headache was 5 per cent. It has been suggested that the anesthetic agent may be rendered irritating to nerve tissue by various factors and thus produce headache. The factors suggested include contamination of the needle by antiseptic solutions used for sterilization of the skin; hypertonicity resulting from dissolving crystals of procaine hydrochloride in cerebrospinal fluid; the pH of the solution. The authors carried out experiments on groups of patients in which 1 minim of iodine or of 6 per cent trinitrophenol (used as skin antiseptics) was added to the anesthetic solution; and also experiments in which the procaine hydrochloride was dissolved in physiologic saline solution, tap water or distilled water instead of cerebrospinal fluid. None of these measures increased the incidence of postoperative headache. It was found that while the pH of the anesthetic solution was definitely lowered by the use of tap water or distilled water, buffer substances are present in the cerebrospinal fluid in sufficient quantities to render it innocuous and restore the pH of the fluid to normal within a few minutes after injection of such a solution.

COMMENT

Some carefully conducted research proves how unsound are most current theories explaining postoperative headache following spinal anesthesia.

C.H.G.

Postoperative Jejunal Ulcer After Gastro-Enterostomy and After Resection

R. ALESSANDRI *(Zentralblatt für Chirurgie, 64:1394, June 12, 1937)* reports that in his surgical clinic at the University of Rome, Italy, he has seen, since 1918, 112 cases in which jejunal ulcer occurred after operation for peptic ulcer in the stomach and duodenum; in 13 of these patients the jejunal ulcer recurred after operation. In 91 of these cases the jejunal ulcer followed a gastro-enterostomy, and in 21 cases a resection of the ulcer area. The primary disease was a duodenal ulcer in most cases; in only 8 instances was there an ulcer of the lesser curvature. In most instances the primary ulcer was of severe type; in 6 cases perforation had occurred and in 6 cases a stenosis. The operation for duodenal ulcer that shows the lowest incidence of postoperative jejunal ulcer is resection according to the Billroth II method with retrocolic gastro-enterostomy; this is the operation that the author now employs most frequently. In the treatment of postoperaive jejunal ulcer the author has found that only radical operation gives satisfactory results.

COMMENT

At a well-known Roman clinic the operation designated as Billroth II has a low score for gastro-jejunal ulcer following operations to relieve duodenal ulcer.

C.H.G.

Urology

The Effect of Surgical Drainage on Kidneys Declared Functionless by Present Tests of Renal Function

M. G. SCHULHOF *(Surgery, Gynecology and Obstetrics, 65:188, August, 1937;* introductory note by Hugh Cabot) reports that in 260 cases in which surgical drainage was performed on the kidney at the Mayo Clinic for conditions other than lithiasis, the kidney was "apparently functionless" in 40 cases. A special study has been made of 10 of these cases, which are reported in detail. In 6 of these 10 cases, various tests of renal function were made both before and after operation; in 4 intravenous urography alone was used as a test of differential function. In these 10 cases, the average time between the onset of symptoms and the operation was three years; it is impossible to determine "with any accuracy" the length of time that renal function had been impaired in these cases, but it was probably sufficiently long to produce compensatory hypertrophy. In 9 cases there was pus in the urine, and in 6 cases positive cultures were obtained before operation. The value for blood urea was normal in all but 2 cases. In 8 of the 10 cases, nephrostomy was the operation performed; in 2 cases cutaneous ureterostomy. In most of the cases the period of time between the operation and the postoperative tests of renal function was "about" twenty days. In all the 10 cases definite improvement in renal function was demonstrated following the operation for surgical drainage. In 4 cases the drained kidney functioned as well as the opposite kidney; in 5 cases function returned to approximately 50 per cent of that of the opposite kidney; in one case function returned to the extent that "good visualization was delayed to the 60 minute intravenous urogram." The author concludes that "a kidney cannot be declared functionless" by clinical tests of renal function except by determining "its complete absence or complete destruction, and the only useful criteria of the extent of renal function, therefore, would appear to be exploration and drainage." Cabot, in the introductory note to this paper, states that the findings demonstrate "that many kidneys having no apparent functional value can be restored to a degree of usefulness, which is of first class importance to the patient."

COMMENT

The briefest statement about this admirable and pointed paper is also the most pithy. Surgery seems to be losing some of its reputation as "only a system of subtraction."

V.C.P.

Avertin as a Relaxing Agent in the Manipulative Removal of Ureteral Calculi

W. D. JARMAN and V. W. SCOTT *(Journal of Urology, 38:111, July, 1937)* have found the use of multiple catheters and bougies the most satisfactory method for the manipulative removal of calculi from the ureter. Since Waddell published his studies of the effect of avertin on the ureter showing that it relieved spasm, the authors employed avertin as an adjuvant to this method. Cystoscopy is carried out with diathane as a local anesthetic; a wax tip bougie is passed to confirm the diagnosis and measure the distance of the obstruction from the uretero-vesical orifice. A ureteral catheter (No. 5 F if possible) is then passed by the ureteral obstruction to the kidney. After this bougies or catheters "of such size and number as the obstructed ureter will permit are passed to the kidney." These are fastened in place with adhesive and the patient returned to the ward to drain through the catheters for forty-eight hours. The patient is then brought to the clinic and a 2 per cent solution of avertin crystals in warm sterile water is instilled through the indwelling catheter, into the renal pelvis. The amount to be injected is determined by the pain produced when the pelvis is moderately distended. The catheter is then plugged and the patient requested to sit upright; after approximately fifteen minutes, the catheters are slowly withdrawn, and during the process more avertin is injected into the lumen of the ureter. The patient is then instructed to void in the erect posture. In

27 consecutive cases treated by this method, the calculus was recovered in all but 2 instances (92.5 per cent). In 13 cases the stone was passed as soon as the patient voided. In 7 cases the procedure had to be repeated once or twice. It is possible, the authors note, that in some instances the calculus might have been passed spontaneously, but prompt removal by the method described decreased the patient's suffering and protected the kidney. The decision whether to attempt any manipulative method for removal of a ureteral calculus, or to operate, must depend upon the findings in each case.

COMMENT

Return to the wax tip bougie is encouraging. If passed ahead of the cystoscope, which is then threaded upon it (exactly as a tunneled sound is passed over a filiform), the wax is protected from any scratches except those by the stone. The cystoscope is withdrawn first, then the catheter, for the same reason. Multiple catheters produce slow and lasting dilatation and avertin prevents the spasm; an ideal combination reaching a promising result.

V.C.P.

Clinical Significance of Anilin Tumor of the Bladder

R. S. FERGUSON *(Journal of Urology, 38:243, August, 1937)* notes that in collaboration with Washburn and Gay, he has opportunity to study the earliest changes in the bladder of workers in anilin dyes, through the adoption of a policy of routine annual cystoscopic examinations of every worker. In this way the development of multiple papillary anilin tumors has been observed, and it has been found (as previously described by Gay) that "the initial damage is to the terminal capillaries in the submucosa." This is followed by hyperplasia of the basal epithelial cells of the mucosa. From their studies of anilin dye tumors, the author and his colleagues have become convinced that these tumors are produced by a cancerigenic agent circulating in the blood, not by the excretion of such an agent in the urine. The author's studies of nonoccupational papillomas have convinced him that the same is true of these tumors. On the basis of these findings he recommends the treatment of both occupational and nonoccupational multiple papillomas of the bladder by irradiation of the entire bladder by high voltage Roentgen rays in divided doses. The author in collaboration with Keyes and Hocker has recently reported 34 cases of multiple tumors of the bladder (nonoccupational) treated by this method, and V. D. Washburn has reported 14 additional cases (occupational and nonoccupational). The combined series includes 12 advanced cases in which treatment was only palliative and was not completed. Of the 36 cases in which treatment was completed, 20 showed complete regression of the tumors, and there have been only 3 recurrences in a year. *The Bladder Tumor Registry*, however, shows 49 per cent recurrences within one year in cases of multiple papillomas treated locally.

COMMENT

It is a pleasure to see the x-ray again in the ascendant after having been forced into occulation behind radium. It will not only head off early cancerous change such as these authors have noted but also protect the field preoperatively and postoperatively without influence upon healing processes.

V.C.P.

Failure of Para-Aminobenzenesulfonamide in Urinary Tract Infections Due to Group D Beta Hemolytic Streptococci

E. A. BLISS and P. H. LONG *(New England Journal of Medicine, 217:18, July 1, 1937)* report that in their use of para-aminobenzenesulfonamide in the treatment of urinary tract infections due to beta hemolytic streptococci, they found 4 cases of hemolytic streptococcal cystitis and pyelitis in which even intensive therapy with this chemical was without effect, although in most cases of this type it gave good results. Bacteriological studies of 2 of these 4 cases showed that the infecting organism belonged to Group D (Lancefield) of beta hemolytic streptococci, and also that para-aminobenzenesulfonamide had no bacteriostatic effect on these organisms. Further experiments were carried out to determine the bacteriostatic effect of this chemical on the various groups of beta hemolytic streptococci (Lancefield classification). It was found that it had a marked bacteriostatic action on various strains of organisms belonging to Lance-

field Groups A and C, and on the larger members of Group G; but that it had no bacteriostatic effect on various strains of Group D and on the smaller members of Group G. These *in vitro* tests, therefore, demonstrate the reason for the failure of para-aminobenzenesulfonamide therapy in the cases reported. They also show that this therapy is not indicated in urinary tract infections due to Group D beta hemolytic streptococci.

COMMENT

The subclassification of bacteria into groups is proof of the fact that we are very far from having a perfect all-round urinary antiseptic. It may raise the discouraging point that perhaps we shall never have such an antiseptic simply because of the subclasses of bacteria, each with more or less its own response or resistance to antiseptics.

V.C.P.

Transfusion in Prostatectomy

L. CHARLET *(Journal d'urologie, 43:514, June, 1937)* reports the use of blood transfusion given when the patient is on the operating table just before anesthesia is induced (spinal anesthesia) in cases in which the poor general condition involves a serious surgical risk. The author has found that such preoperative transfusion has the following results: The spinal anesthesia is better tolerated. The operative bleeding is definitely reduced. The operative "shock" is much less. The postoperative condition is excellent. The employment of preoperative transfusion does not in any way render the usual pre-operative and postoperative care of prostatectomy cases less necessary. It has proved, however, of definite value in poor risk cases, and has made possible a successful prostatectomy in some patients on whom the author would have hesitated to operate without transfusion. He suggests that this method might be more widely employed in less serious cases.

COMMENT

Transfusion, which is one of our last defenses against all kinds of shock, may very well be one of the first preventives of it. This paper is progressive and instructive accordingly.

V.C.P.

+ Pediatrics +

Treatment of Diabetes in Children Without Dietary Restriction

C. E. RAIHA *(Acta Paediatrica, 19:433, June 30, 1937)* reports that since the autumn of 1934 diabetic children treated at the children's clinic of the University of Helsinki have not been restricted as to diet, but have been given insulin sufficient to reduce the blood and urinary sugar. When beginning this treatment large doses of insulin were often given, in an attempt to render the urine sugar free promptly, but it was found that this caused too great variation in the blood sugar with the danger of hypoglycemic reactions. The present standards for carrying out this treatment now adopted are: The child's general condition must remain good. Diet is not restricted but overfeeding and excess of sweets are avoided although sugar is not entirely forbidden. Insulin is given in such amounts as is necessary to keep the patient free from acidosis and the blood sugar in the morning before breakfast is not above 0.5 per cent. As far as possible only two injections of insulin daily are given, at the beginning of the principal meals. Play and exercise are encouraged in the hospital and, when the children are returned home, ordinary activity is advised as for a normal child. The children are instructed to carry a piece of sugar with them to take if they feel symptoms of hypoglycemia. When the urine becomes entirely sugar-free the insulin dosage is reduced. In children that have previously been treated by diet and insulin, the insulin dosage must be somewhat increased on starting the non-restricted diet, but the increase necessary is often comparatively small. In children in whom treatment was begun by the method of unrestricted diet, the insulin required was usually less than in those previously treated by diet and insulin. Up to January 1, 1936, it was found that under this treatment, the mortality of children with diabetes had been definitely reduced as compared with previous years in the Clinic under

restricted diet treatment. The children were in better general condition; grew normally and were relatively resistant to infection.

Effect of Emulsification on the Potency of Viosterol in the Treatment of Rickets

D. H. SHELLING (*Journal of Pediatrics, 10:748, June, 1937*) reports a study of the effect of viosterol emulsified in malt extract or in canned evaporated milk on the healing of rickets in children. when the malt emulsion of viosterol was given in the milk, an amount equivalent to 675 units daily brought about the healing of rickets of moderate and of severe degree in an average of three months. When the viosterol emulsified in canned evaported milk was used, the rickets was healed with approximately the same degree of rapidity on a dosage of 240 to 400 units daily. One child with a severe degree of rickets, general osteoporosis and skeletal deformities showed complete healing in less than five months on a daily dosage of 400 units of viosterol in this form. In a larger group of rachitic children previously treated with viosterol without emulsification, a dosage of 4,500 international units was required to heal all degrees of rickets "within a reasonable time;" with very severe rickets larger amounts were required. It is, therefore, evident that the addition of visoterol to milk in the form of an emulsion increases the efficacy of viosterol in the treatment of rickets "about tenfold." The author suggests that this is due to "reducing the particle size of the fat in which the vitamin D is carried" by the process of emulsification, so that it is "probably more easily absorbed from the gastrointestinal canal."

Ascorbic Acid (Vitamin C) Treatment of Whooping Cough

M. J. ORMEROD and B. M. UNKAUF (*Canadian Medical Association Journal, 37:134, August, 1937*) note that ascorbic acid (vitamin C) has been found by some investigators to have a definite detoxifying action on bacterial toxins; it has been used in the treatment of pneumonia by a few German physicians. Various investigators have shown also that the tissues of normal children and young animals contain more vitamin C than those of normal adults, and that larger amounts of vitamin C must be given to young subjects to reach the saturation point; this indicates a greater need of vitamin C in children than in adults. All these conditions led the authors to employ vitamin C in the form of ascorbic acid in a small series of cases of whooping cough. They report 9 cases of their own and one treated by another practitioner. All these children showed the typical symptoms of whooping cough and had a history of exposure to infection. In all, the period of the typical paroxysmal cough was definitely shortened by the treatment "from a matter of weeks to a matter of days." In the first cases treated the dosage was 200 mg. daily, but in subsequent cases the dosage was increased to 500 mg. daily for three to four days, then 250 mg. daily until the cough was relieved (four to five days). There is no danger of overdosage, as any excess of vitamin C is excreted in the urine. In these cases the authors did not check the results with cough plates to determine "whether the infectivity subsides simultaneously with the spasmodic symptoms," but they are continuing the treatment with a larger series of cases in which such tests will be employed.

Tubercle Bacilli in the Gastric Washings of Infants and Children

J. L. ROTHSTEIN (*American Journal of Diseases of Children, 54:47, July 1937*) reports that in a series of 86 children who gave positive cutaneous reactions to tuberculin at the Lenox Hill Hospital, New York City, no evidence of tuberculosis could be found by physical or roentgenographic examination. Tubercle bacilli were demonstrated in the gastric washings by guinea-pig inoculation in 7 (8.14 per cent.) of these children. This indicates an active tuberculous focus, usually in a hilar or tracheobronchial lymph node. If active tuberculosis is present, but is not demonstrated by this method in children showing no other evidence of the disease except the positive tuberculin reaction, such chil-

dren may remain "an unrecognized source of tuberculous infection to uninfected children."

The Four Lead Electrocardiogram of Children

P. F. DWAN and M. J. SHAPIRO (*American Journal of Diseases of Children, 54:265, August, 1937*) report a study of the electrocardiograms of children with rheumatic and congenital heart disease, using the fourth lead, or so-called chest lead. When the standard technique was used with the fourth lead in children with rheumatic heart disease, evidence of myocardial damage was obtained in 36 per cent. of the cases, while with the conventional leads, such evidence was found in 29 per cent. The fourth lead in these cases, therefore, gave definite additional diagnostic information, "as well as a striking corroboration of the minor changes shown in the conventional leads." In the study of cases of congenital heart disease, the fourth lead did not give any additional information. In a study of daily electrocardiograms with the fourth lead, in 4 children with subacute rheumatic heart disease, the electrocardiogram was found to remain constant from day to day when there was no clinical change. In 8 cases, the standard technique for the four lead electrocardiogram was varied by placing the left arm electrode on the left leg. It was found that this variation of technique caused a definite change in the electrocardiogram, all the complexes tending to assume a more upright direction. In using the fourth or chest lead, therefore, the standard technique must be strictly followed.

Iron Therapy in Hepatomegaly

H. L. EDER and P. A. GRAY (*Archives of Pediatrics, 54:403, July, 1937*) note that enlargement of the liver of unknown etiology is not an uncommon condition in infancy and childhood. The authors have observed 5 cases of hepatomegaly in children in the past year; 4 of these patients were diabetic. None of them had a positive Wassermann reaction, nor was there any indication in the family or personal history of syphilis. In the 4 diabetic children, the diabetes had been difficult to control with frequent hypoglycemic episodes. All these patients were given iron in the form of saccharate iron carbonate, 3½ grains three times a day in cod-liver oil, or iron and ammonium citrate, 10 grains three times a day, although there was no definite anemia shown by routine blood counts. Within a few days to two weeks after the iron therapy was instituted, the liver margin receded beneath the costal arch in all these cases. Roentgenograms also showed a marked reduction in the liver shadow. The general condition of these children showed improvement under the iron therapy with diet and insulin to control the diabetes, although the diabetes remained severe. The diminution in the size of the liver under iron therapy, which had not occurred under treatment for the diabetes alone, suggests that there may be some relationship between tissue iron deficiency and hepatomegaly in children.

AMERICAN FOUNDATION REPORT

To any one who reads the voluminous report of the American Foundation on its medical inquiry, it becomes apparent at once that the solutions for the problems inherent in the easy availability and delivery of medical care to the American people, as well as the sustained maintenance of high general health standards (which or course must include extension of preventive medicine) cannot be obtained by any easily devised short-cuts. —*N. Y. State Journal of Med.*

CONGENITAL HYPERTROPHIC PYLORIC STENOSIS

EDWARD J. DONOVAN, New York (*Journal A. M. A.*, Aug. 21, 1937), states that congenital hypertrophic pyloric stenosis occurs about seven times more often in boys than in girls.

THE STONELESS GALLBLADDER: ANALYSIS OF 100 CASES TREATED BY CHOLECYSTECTOMY

CARL A. KUNATH, Iowa City (*Journal A. M. A.*, July 17, 1937), maintains that it is largely through the acceptance of the "dyspepsia syndrome" in gallbladder disease that the problem of the stoneless gallbladder has arisen. He bases his study on a follow-up of 100 consecutive cases of cholecystectomy carried out on stoneless gallbladders during a period of eight years. These are all uncomplicated cases in which no operative procedures other than cholecystectomy were carried out on the biliary tract. Compared with a similar series of cases in which stones were present, the stoneless cases show a greater morbidity, a higher postoperative mortality and only about half as many cures. The stoneless cases have been analyzed carefully from the standpoint of pathologic changes present in the gallbladder wall, and from the standpoint of cholecystegraphic evidence but little help is offered from either of these sources in regard to prognosis following cholecystectomy. In general, the end results tend to be better as the pathologic changes become more marked; but there are many queer aspects which are difficult to reconcile. Analysis of the preoperative symptoms is probably of greater value than anything else in estimating the probable benefits to be obtained from cholecystectomy. Colic was cured in 86 percent of the cases in which it was present. In regard to dyspepsia, cures were brought about in only 33 per cent. Furthermore, of the patients who did not complain of dyspepsia prior to operation, 38 per cent now report that they have such symptoms. This would seem to be a strong argument in favor of the view that dyspepsia syndrome is related not so much to disease of the gallbladder as to nonfunction of the gallbladder. In attempting to explain the poor results following cholecystectomy, the author was able to find a few definite errors in diagnosis. These included duodenal ulcers, a duodenal diverticulum, a tuberculosis spondylitis and a chronic gonococcic peritonitis. By far the majority of diagnostis errors were associated with cases of irritable intestine and spastic conditions of the gastro-intestinal tract. The greater majority of the unimproved cases must be explained on a basis of physiologic changes or altered function. The borderline cases, between organic and functional disease are the ones in which diagnosis is difficult and in which cholecystectomy is apt to be disappointing. The hope for improvement in the treatment of the stoneless gallbladder appears to depend on a better understanding of the physiology of the biliary tract. It is entirely likely that this improvement will be in the form of more intelligent medical management based on a sound knowledge of the common morbid physiologic changes that occur in the biliary tract.

PERTUSSIS VACCINE TESTED

Because of the equivocal results attending the use of pertussis vaccine for the prevention of whooping cough, and the difference of opinion still existing concerning the value of such prophylactic injections, the New York City Department of Health has decided to limit its administration of the vaccine to a carefully controlled experimental project now being carried on under the direction of Dr. Ralph Muckenfuss, Director of Laboratories, at the Williamsburg-Greenpoint health center and at the Prospect Clinic in Brooklyn. Heretofore the vaccine was administered on request at all the Baby Health Stations. This practice will now be discontinued. Through the experimental project the Department hopes to arrive at definite conclusions. —*New York State Journal of Med.*

WHAT HAVOC WE MAKE OF OUR CHANCES

In the wards, where quiet and order reign, he has further opportunities for insight, and for more deliberate observation. He learns, with higher exactness, to trust and distrust himself to be slow to find fault with other men and quick to help them: he becomes acquainted with heavy responsibility, with the full bitterness of a bad mistake, the full delight of pulling people out of death's way. He begins to be able to read characters, and to see, by the scars on the lives allotted to his care, what havoc we make of our chances.—STEPHEN PAGET.

Medical Book News

All books for review and communications concerning Book News should be addressed to the Editor of this department, 1313 Bedford Avenue, Brooklyn, New York.

Edited by Alfred E. Shipley, M.D., [Dr. P.H.]

A New Edition of an Excellent Textbook

MANUAL OF THE DISEASES OF THE EYE. For Students and General Practitioners. By Charles H. May, M.D. Fifteenth edition revised. Baltimore, William Wood and Company, [c. 1937]. 498 pages, illustrated. 12mo. Cloth. $4.00.

The delayed publication of this fifteenth and new edition of *Diseases of the Eye* has made up for its tardiness by improvements in subject matter. Not only have there been additions of new material, but obsolete matter has been deleted. The only criticism of the reviewer is that special care should be taken, in a textbook of this kind, to omit any novelties or unsubstantiated contributions to the ophthalmological armamentarium. There are one or two features which might be included in this statement; for instance, polaroid protective lenses.

With each edition of this work, the reviewer feels grateful to the publishers for the satisfactory binding, printing and paper which build this little book.

JOHN N. EVANS.

Classical Quotations

● The vital spirit is generated by the mixture in the lungs of the inspired air with the subtly elaborated blood, which the right ventricle sends to the left. The communication between the ventricles, however, is not made through the mid-wall of the heart, but in a wonderful way the fluid blood is conducted by a long detour from the right ventricle through the lungs, where it is acted on by the lungs and becomes red in color, and passes from the arteria venosa into the vena arteriosa, whence it is finally drawn by the diastole into the left ventricle.

Michael Servetus
(1509-53)
Restitutio Christionismi: 1553

A G. U. Book for the General Practitioner

MEDICAL UROLOGY. By Irvin S. Koll, M.D. St. Louis, The C. V. Mosby Company, [c. 1937]. 431 pages, illustrated. 8vo. Cloth, $5.00.

This book fulfills a definite want and should be of particular interest to the general practitioner. It is he who sees the patients first and he should be in a position to treat many of them himself; he should also be able to recognize the signs and symptoms which suggest the advisability of employing the more highly technical procedures which are better done by the specialist. This little book will definitely help to guide him along these lines.

Venereal diseases in both male and female are well covered, although it is the opinion of this reviewer that the author is a bit optimistic about the time required to cure these conditions.

The chapters on

kidney infections, with particular reference to their medical care, are very good. Perhaps, a bit too much stress is laid upon intravenous urography. This is, of course, a valuable diagnostic procedure, but it does not replace cystoscopy and retro-grade pyelography. One notes the absence of any reference to mandelic acid as a therapeutic agent. Doubtless the book came off the press before this drug had established its place, as it definitely has, as a useful urinary antiseptic. All in all it is an excellent book and is heartily recommended to the general practitioner and the pediatrician. Even the urologist may read it with interest and profit.

NATHANIEL P. RATHBUN.

Reminiscences of a Nurse

I WAS A PROBATIONER. By Corinne J. Kern. New York, E. P. Dutton & Co., Inc., [c. 1937]. 314 pages. 8vo. Cloth, $2.50.

The title of this book at once reveals its autobiographical nature. While a bit of romance and a mild mystery claim the attention of the general public, it is chiefly interesting to nurses for its frank and sympathetic picture of the reactions of a probationer thirty-eight years ago.

Making no claim to literary distinction, nor having any deep plot, the book is easy, entertaining reading. To the modern nurse it has value as a study in contrasts. It seems almost incredible that a probationer could have been allowed to assume immediately and with no preparation, such heavy responsibilities. Preparing supper for the night nurses between her ministrations to a ward full of patients, including a typhoid case, is a mild sample.

Many of the incidents will recall to the graduate nurse memories of her early days. She will understand that the frank conversations (shocking or even disgusting as they may seem to the lay reader) were really only a type of "whistling in the dark" to maintain one's courage. The nurse in training scorns to appear ill at ease or afraid in unfamiliar, often terrifying situations. She must preserve her "poker face" by all means!

It is to be hoped that the public in reading the book, will not confuse the experiences of this probationer with modern methods of preparing nurses.

MAUDE E. TRUESDALE.

Two Books Reviewing Progress in Childbirth Care

INTO THIS UNIVERSE. The Story of Human Birth. By Allan Frank Guttmacher, M.D. New York, The Viking Press, [c. 1937]. 366 pages, illustrated. 8vo. Cloth, $2.75.

Into this Universe is a book for patients, students, laymen; physicians too may read it with interest and benefit.

It tells not only the bare facts of child birth, but also the part it plays in the broader field of medicine and general culture.

The book sets forth *"in the cramped confines of a single volume," something of the folk lore, the history and the scientific facts of birth.* The science of obstetrics is explained interestingly and the many phenomena which the word connotes, is made intelligible.

The gap between obstetrics of today and the past is bridged. Thus the chapter on diagnosis of pregnancy contains an interesting account of Joanna Southcott, a famous case of psuedocyesis. "It represents either the tragic tale of a sincere woman who deceived herself or that of a scandalous charlatan".

Smollett's description of poor Mrs. Trunnion in "Peregrine Pickle" is a highly entertaining episode.

The duration of pregnancy has been dramatized by the medico-legal records of bygone days. A full report of the Scottish Jardine case is given. There was the case of the "widow of a bookseller of Wolfenbüttel delivered of a child thirteen months after her husband's death. The successor of this bookseller acted as a shopkeeper and was so convinced of her purity, that he married her shortly afterwards." The report concludes "we may not uncharitably conclude, that had it not been for the consolatory attentions of the said Christopher, her delivery might have been delayed even much longer than it was."

Doctor and layman may read the book with pleasure and profit. It tells the scientific tale of obstetrics down through the ages with charm and enthusiasm. Anyone interested in childbirth should own this book.

FRANCIS B. DOYLE.

CHILDBIRTH: YESTERDAY AND TODAY. The Story of Childbirth Through the Ages, to the Present. By A. J. Rongy, M.D. New York, Emerson Books, Inc., [c. 1937]. 192 pages, illustrated. 12mo. Cloth, $2.00.

Rongy has written this book for the public as a companion volume to *Safely Through Childbirth* because "the story of the birth of human beings has been largely overlooked by historians." The story of progress through the ages, with the long record of ignorance and superstition, is set down in simple language, and occasional repetitions do not spoil the tale.

The famous Academy of Medicine Report is discussed frankly, and Rongy pays his respects to the proprietary hospitals, incompetent physicians, overspecialization and specialists in obstetrics who have quick able hands, but very poor judgment. Someone must make it impossible for doctors to rush their cases, so reform and real improvement in maternal mortality will come only as a result of pressure applied by women themselves all over this country.

CHARLES A. GORDON.

A New Edition of Joslin

THE TREATMENT OF DIABETES MELLITUS. By Elliott P. Joslin, M.D. Sixth edition. Philadelphia, Lea & Febiger, [c. 1937]. 707 pages, illustrated. 8vo. Cloth, $7.00.

The fifth edition of *Treatment of Diabetes Mellitus* by Elliot P. Joslin, M. D., Howard F. Root, M. D., Priscilla White, M. D., and Alexander Marble, M. D. published in 1935, is accepted without question as the Bible on this subject. It is founded on experience with some 13,000 cases of diabetes in the period since the year 1898. All phases of the subject are well covered. As a reference work it is excellent. This fifth edition is recommended without qualification.

In the preface it is stated that "protamine insulin necessitated the revision of this book", as the reason for this edition. We question the necessity of issuing a new edition simply to include this one of several new insulin compounds. A short monograph on protamine insulin and its clinical application might be justified at this time. This reviewer would like to see more individual monographs published on specific additions or new phases of medicine. He believes this would be generally appreciated by the profession.

If one does not have Joslin's fifth edition of 1935, the new 1937 volume is highly recommended as the last word on the much misunderstood and mistreated "Lady Diabetes"—"The Jealous Mistress."

PAUL C. ESCHWEILER.

A Review of American Psychiatry

THE MENTALLY ILL IN AMERICA. A History of Their Care and Treatment from Colonial Times. By Albert Deutsch. Garden City, Doubleday, Doran & Company, [c. 1937]. 530 pages, illustrated. 8vo. Cloth, $3.00.

This is a most interesting historical document dealing with the problems that confront American civilization in handling the mentally ill. From witchcraft and fanaticism of early colonial times, when thousands of harmless insane were burned at the stake and others hanged, imprisoned or tortured, the book traces the path by which modern psychiatric methods were evolved. Included also are discussions on the origin and evolution of the mental hygiene movement, and throughout are detailed accounts of the activities of various physicians and others whose influence and teaching have guided psychiatry to its present status.

A. M. RABINER

A Woman Physician Reviews Her Career

A WOMAN SURGEON. The Life and Work of Rosalie Slaughter Morton. New York, Frederick A. Stokes Company, [c. 1937]. 399 pages. 8vo. Cloth, $3.00.

Some of the remarkable achievements of a remarkable personality are recorded in Dr. Rosalie Slaughter Morton's autobiography. One of the deepest convictions of this unusual book finds its expression in a short sentence in Dr. Morton's Preface: "in my town I was a minority of one who had to believe in the righteouness of minorities." Her "town" was Lynchburg, Virginia, then a conservative community not likely to give birth to anything more liberal than the gracious prejudices of two centuries of gracious living.

But Dr. Morton's mother was a member of the Society of Friends. In this "clash" of *locale* with the love of a child's heart for her mother lies the origin of a great life greatly lived whether in the drudgery of a physician's every day duties or in thrilling experiences told with rare power. Out of this clash, too, must have come something of Dr. Morton's whole-hearted

loyalty to women and her belief in their abilities. In this day of sex denigration comforting to women in many countries will be her expressed faith in their work, and even in the dedication of her book: "To the Daughters of Æsculapius everywhere."

Dr. Young of Johns Hopkins University calls attention to Dr. Morton's medical ancestry: "seventeen direct and fifty-two indirect collateral relatives having devoted their lives to medicine." Dr. Young speaks also of the fact that Dr. Morton, one of the most eminent surgeons in America, "was the first woman to undertake surgery in Washington." A happy but brief married life has but set the trend of vicarious mothering of all who need her, whether the need is represented by some poor woman unable to meet the fees of an operation or by a group of war orphans or refugees in some distant country, for nothing that is human is alien to the great heart of Dr. Morton.

Dr. Morton's pioneer courage has shown itself in many ways during the sixty years of her life: in 1909 in the founding (not without opposition) of the first Public Health Education Committee at a meeting of the American Medical Association; in 1915 in her medical and surgical work in Labrador; during the World War in medical, surgical and educational service to Serbia; and in the founding of the American Women's Hospitals.

Completely absorbing is this story of a woman surgeon guided by generous impulses, and courage, and by an unswerving sense of responsibility to and an unchanging love for our human nature.

JEANNETTE MARKS.

British Pediatrics in Brief

A HANDBOOK ON DISEASES OF CHILDREN, Including Dietetics, Welfare and the Common Fevers. By Bruce Williamson, M.D. Second edition. Baltimore, William Wood & Company, [c. 1936]. 329 pages, illustrated. 16mo. Cloth, $4.00.

This little book of some three hundred pages, written by an Englishman is designed for teaching. It would seem that it must be much supplemented to prepare a doctor for the care of children. For instance, of the sixteen lines given to the treatment of typhoid fever, twelve are devoted to prevention antisepsis, and four to actual treatment, which is, essentially, "A diet chiefly of milk," "in cases with constipation, an enema of olive oil on alternate days." For asthma, the intimation of any sensitivity is very faint—what might have been expected fifteen or twenty years ago. Allergy isn't found in the index, nor in the discussion of the disease.

In a general way, the reviewer would consider that American observations of children and their diseases is at least as advanced as that of the English, and this little book would be helpful only because there is little space to be covered in seeking information.

WALTER D. LUDLUM.

A New Edition of Goldzieher

PRACTICAL ENDOCRINOLOGY. Symptoms and Treatment. By Max A. Goldzieher, M.D. Second edition. New York, D. Appleton-Century Company, [c. 1937]. 344 pages, illustrated. 8vo. Cloth, $5.00.

The second edition of *Practical Endocrinology* differs from its predecessor only in the material added to bring it up to date. As noted by the author in the preface, two methods were employed in accomplishing this, viz: by direct addition to the context of the manuscript proper, and secondly by an appendix to which references are made by means of numbers distributed through the text.

Among noteworthy additions are discussions on headache, epilepsy, and the treatment of anterior pituitary disorders. Under the last heading the author gives us the benefit of his experience with the potent endocrine products of a Canadian firm, as well as the equally effective German preparations. The writer's persistent belief in the routine use of the dinitro compounds, dinitro-phenol and dinitro-cresol in the face of the discouraging current literature on their use is especially interesting. The supplement or appendix contains a wealth of material, some of it new, and the rest included to round out the context of the first edition.

Practical Endocrinology is a sound, interesting, and instructive text-book, well worth reading.

CHARLES G. WILLIAMSON.

Fundamentals in Bone Surgery

A BRIEF OUTLINE OF MODERN TREATMENT OF FRACTURES. By H. Waldo Spiers, M.D. Second edition. Baltimore, William Wood & Company, [c. 1937]. 137 pages, illustrated. 8vo. Cloth, $2.00.

This book, as the author states in the preface to the second edition, is a "brief outline of the modern treatment of fractures". It makes no pretense to be a complete study of treatment and end-results to be attempted in a more comprehensive book. In fact, the author offers this work as a compendium to avoid that confusion which may come to students from the fuller discussion of fractures found in usual textbooks.

As an outline, it has the virtue of being carefully made, generally inclusive, and up to date. Some of the modern methods of mechanical treatment of fractures are briefly considered, such as the Boehler frame for skeletal traction in fractures of both bones of the leg, and the use of peg fixation in fractures of the neck of the femur.

The illustrations are schematic and sketchy but are adequately instructive and pertinent. Such a book will give a student fundamentals in the theory of the treatment of fractures. Equipped with such basic principles, the reader will be prepared for a more complete and scientific study of methods and technique.

JOSEPH RAPHAEL.

Heat Therapy

SHORT-WAVE DIATHERMY. By Tibor de Cholnoky. New York, Columbia University Press, [c. 1937]. 310 pages, illustrated. 8vo. Cloth, $4.00.

This is an interesting presentation of a mooted subject. The author offers a chapter on the historical outline; another on physical aspects; three chapters on experimentation, (a) bacteria and other organisms, (b) animals, (c) wave lengths; two chapters on technic, (a) short wave treatments, (b) general and mechanical principles in short wave technic; and eight chapters on clinical applications.

He devotes a brief chapter to his conclusions. His bibliography is complete and adds much to the value of the book. It is a wholesome and interesting addition to the books and articles already published. As he acknowledges, much more can be presented in the future on this valued mode of therapy.

JOHN J. HAUFF.

Alcoholism Intelligently Analyzed

TO DRINK OR NOT TO DRINK. By Charles H. Durfee, Ph.D. New York, Longmans, Green and Co., [c. 1937]. 212 pages. 8vo. Cloth, $2.00.

This is an enlightened and highly helpful discussion of alcoholism with a background of distinguished achievement in the reintegration of "problem-drinkers," as the author calls them. If one can use alcohol without the creation of personality and social messes one is not a problem-drinker. Dr. Durfee has been very successful in re-educating and socially orienting the house-guests whom he has studied on his Rhode Island farm. It is a realistic group method that is mainly invoked. Dr. Durfee scores the moral and other futile techniques and approaches the subject in an utterly rational fashion. Fanatics, moralistic uplifters, narrow propagandists and professional reformers will be nonplussed by Dr. Durfee's rationalism, which includes the serving of cocktails as a matter of course in his household in the usual course of entertaining. His little book seems to this reviewer like a breath of fresh air blowing through the morass that to date has in large degree constituted the problem of alcoholism.

ARTHUR C. JACOBSON.

New Edition of Zahorsky's Synopsis

SYNOPSIS OF PEDIATRICS. By John Zahorsky, M.D., and T. S. Zahorsky, M.D. Second edition. St. Louis, The C. V. Mosby Company, [c. 1937]. 367 pages, illustrated. 12mo. Cloth, $4.00.

The second edition of *Synopsis of Pediatrics*, has been revised by the addition of a number of new sections and by changes in those devoted to diagnosis and therapeusis. This brings the volume abreast of modern developments in the field. Pediatric literature has become so voluminous with so many recent additions to our knowledge, that to undertake to condense this information in such a compact form was no light task. The authors' purpose is to provide both the student and the general practitioner with a digest of pediatric knowledge, to which will give in a reliable way essential information on the subject. A better

working bedside knowledge of the important clinical symptoms, diagnosis and treatment may, no doubt, be thus cultivated.

This book, the reviewer believes, accomplishes in an excellent manner the purpose the authors had in mind. It should prove popular with the student and even with the general practitioner. The authors have maintained excellent judgment in the selection of the essential points for inclusion under each disease. The publishers are to be commended on the fine workmanship which is evident in the clear printing and the attractive and neat binding.

JOSEPH C. REGAN.

Biochemistry Briefly Considered

THE METABOLISM OF LIVING TISSUES. By Eric Holmes, M.D. New York, Macmillan Company, [c. 1937]. 235 pages. 12mo. Cloth, $2.25.

This book should interest the internist and the biochemist whether a beginner or a student of the subject. It contains a survey of our present-day knowledge of tissue metabolism presented clearly, and makes easy and interesting reading. The author is an experienced teacher of biochemistry, and he has treated the subject matter in a way which renders it easier to visualize the aspects of tissue metabolism. Among the chapters included are thorough discussions of the nature and action of the enzymes, the carbohydrate, fat and nitrogen metabolism of the liver, and hormones and vitamins. Twenty-five pages are devoted to a study of the influence of the endocrine glands on metabolism.

S. J. COHEN.

Childhood Psychology

OUR CHILDREN IN A CHANGING WORLD. An Outline of Practical Guidance. By Erwin Wexberg, M.D., with Henry E. Fritsch. New York, The Macmillan Company, [c. 1937]. 232 pages. 8vo. Cloth, $2.00.

This work is another contribution to literature concerning behavior problems associated with childhood. The authors take the point of view that children are neither good nor bad, but "simply young human beings, with certain inherent instincts, desires and capabilities which are welded with the child's experience and education to form a final pattern of personalities". They feel that the period of life, in which we are at present living, has seen a breakdown of the rigid formulae and traditions of the past, and with this there necessarily has been an increase in the problems of childhood development.

The book is divided into three parts consisting of general problems, special problems, and education. Under general problems are discussed the development of personality and the influence of environment. Under special problems, various types of children are described, such as the lying child, the lazy child, and so on. Various bad habits and nervous symptoms are also described. Under education, measures are suggested for correction of the behavior problems which have arisen.

The approach throughout the book is that of individual psychology, since one of the authors has been an active influence in this movement. The work should be of interest to the practitioner who desires to add to his information something on the problems of childhood.

STANLEY S. LAMM.

A New Work by Rowe

CLINICAL ALLERGY DUE TO FOODS, INHALANTS, CONTACTANTS, FUNGI, BACTERIA AND OTHER CAUSES, MANIFESTATIONS, DIAGNOSIS AND TREATMENT. By Albert H. Rowe, M.D. Philadelphia, Lea & Febiger, [c. 1937]. 812 pages, 8vo. Cloth, $8.50.

The author's present work embraces the entire field of clinical allergy, including all of the material in his former monograph on *Food Allergy*. It contains seven hundred pages of reading matter and eighty pages of bibliography. The early chapters deal with the mechanism of allergy, its relations to anaphylaxis and immunity. As there is little positive knowledge of these conditions, much of the matter in these chapters is controversial. The later chapters discuss the manner of arriving at a diagnosis of allergic disease, the importance of a thorough history with sample blanks for taking same, skin testing, its importance and limitations, the diagnosing and treating of allergic disease by the use of elimination diets, and finally, the systems which may give rise to allergic disease. According to the author, practically every organ of the body is subject to allergic symptoms. Many examples of this are cited, some from his own experience, and others culled from the

literature. Not all such reports are proved cases of allergy.

The literature has been carefully reported, in fact practically everything of importance done in the field of allergy in the past ten years is quoted. Much emphasis is placed on the role food plays in causing allergic symptoms, and the relief of the same by the use of elimination diets. An appendix of fifty pages records many interesting case histories, and also gives charts to be kept by the patient for recording symptoms, menus free from foods apt to cause allergic symptoms, prescriptions used in the treatment of allergic disease, etc. The book will be read with interest by allergists.

The internist or surgeon who reads it may be a bit confused by the divergence of opinion among allergists on many points which, however, is bound to happen in a field so new and so obscure as that of allergy. The volume shows conclusively that allergic symptoms do occur in many organs of the body, for which reason it may be read with interest and advantage by any physician.

GEORGE A. MERRILL.

A Handbook for the Otolaryngologist

DISEASES OF THE NOSE, THROAT AND EAR. A Handbook for Students and Practitioners. By I. Simson Hall, M.B. Baltimore, William Wood & Company, [c. 1937]. 423 pages, illustrated. 16mo. Cloth, $4.00.

The writing of a handbook on any medical specialty for use by the general practitioner or medical student is a difficult task. The writer is always tempted to say too much. To avoid this error he very easily yields to the other temptation, and omits valuable information. The author of this work, Dr. I. Simson Hall, of the Royal Infirmary and University of Edinburgh, has successfully steered a middle course.

The result is a complete and satisfactory handbook for those who want to know the fundamentals of diseases of the ear, nose and throat, without going into the details necessary for one making a specialty of the subject. The style of the author makes it easy to read and understand, even by those not very familiar with the subject.

He has gone into detail in describing the methods of examining and treating patients and the use of the instruments for these examinations, details which would be unnecessary for one familiar with the subject, but of much value to the beginner. Pathology, especially laboratory pathology, has been omitted. Anatomy, physiology, symptoms, diagnosis and treatment are well given. Most of the operations are described, but not in detail. Endoscopy is spoken of, but not included in the work, the author considering it a specialty within a specialty.

The illustrations are original and good. An appendix with formulae in the back of the book will be found useful. It is a work that the medical student and general practitioner will find helpful.

JOHN W. DURKEE.

A Book for Modern Needs

THE LABORATORY DIAGNOSIS OF SYPHILIS. The Theory, Technic, and Clinical Interpretation of the Wassermann and Flocculation Tests With Serum and Spinal Fluid. By Harry Eagle, M.D. St. Louis, C. V. Mosby Company, [c. 1937]. 440 pages, illustrated. 8vo. Cloth, $5.00.

This book is an especially timely one, arriving as it does during a period of widespread medical and lay interest in syphilis. The author obviously has had a wide experience in laboratory diagnosis of syphilis, covering not only practical phases but also underlying principles. His original contributions dealing with basic factors governing complement fixation and flocculation reactions are well known.

The review of literature on preparation and standardization of various reagents, as well as the knowledge dealing with underlying biochemical and immunological principles involved in complement fixation and flocculation tests, is extremely valuable to the serologist. Lucid explanations dealing with actual technique of various tests are of value to laboratory technicians. Especially valuable is the theoretical explanation for various technical precautions involved in the serological test. More important still, however, is that portion of the book dealing with the clinical evaluation of the serological report. The chapter bearing on the significance of a positive Wassermann or flocculation test and the analysis of false-positive reactions, as well as that dealing with the interpretation of quantitative, doubtful, anticomplementary and negative serum

reactions, is of practical interest to the general practitioner, and should be read by anyone treating syphilitic patients, be he family doctor or specialist.

The author's recommendations as to the adoption of the new method of reporting serological tests for syphilis on the basis of *positive, negative, doubtful,* are important and clearly described.

The reviewer fears, however, that the adoption of the term *doubtful,* as defined by the author, to replace reactions that have hitherto been described as 3 plus, 2 plus and 1 plus by general acceptance, is apt at this time to create a certain amount of confusion in interpretation of the serological report. One practical point that deserves mention is his insistence on the importance of repeating a positive serological test before making a positive diagnosis of syphilis. This is all too infrequently done, and often leads to grave and irreparable error in cases where the single positive report is due to technical errors inherent in the test.

THEODORE J. CURPHEY.

BOOKS RECEIVED

Books received for review are promptly acknowledged in this column; we assume no other obligation in return for the courtesy of those sending us the same. In most cases, review notes will be promptly published shortly after acknowledgment of receipt has been made in this column.

LATENT SYPHILIS AND THE AUTONOMIC NERVOUS SYSTEM. By Griffith Evans, F.R.C.S. Second edition. Baltimore, William Wood and Company, [c. 1937]. 158 pages, illustrated. 8vo. Cloth, $3.00.

THE HARVEY LECTURES. Delivered under the auspices of The Harvey Society of New York. Series XXXII. Baltimore, The Williams & Wilkins Company, [c. 1937]. 245 pages, illustrated. 8vo. Cloth, $4.00.

AN INTRODUCTION TO DERMATOLOGY. By Richard L. Sutton, M.D., and Richard L. Sutton, Jr., M.D. Third edition. St. Louis, The C. V. Mosby Company, [c. 1937]. 666 pages, illustrated. 8vo. Cloth, $5.00.

TREATMENT BY DIET. By Clifford J. Barborka, M.D. Third edition, revised. Philadelphia, J. B. Lippincott Company, [c. 1937]. 642 pages, illustrated. 8vo. Cloth, $5.00.

OBSTETRICS FOR NURSES. By Joseph B. DeLee, M.D., and Mabel C. Carmon, R.N. Eleventh edition, revised and reset. Philadelphia, W. B. Saunders Company, [c. 1937]. 659 pages, illustrated. 12mo. Cloth, $3.00.

EMOTIONAL ADJUSTMENT IN MARRIAGE. By Le Mon Clark, M.D. St. Louis, The C. V. Mosby Company, [c. 1937]. 261 pages. 8vo. Cloth, $3.00.

YOUR DIET AND YOUR HEALTH. By Morris Fishbein, M.D. New York, McGraw-Hill Book Company, Inc., [c. 1937]. 298 pages. 8vo. Cloth, $2.50.

RUSSIAN MEDICINE. By W. Horsley Gantt, M.D. (Clio Medica). New York, Paul B. Hoeber, Inc., [c. 1937]. 214 pages, illustrated. 16mo. Cloth, $2.50.

ATLAS OF HEMATOLOGY. By Edwin E. Osgood, M.D., and Clarice M. Ashworth. San Francisco, J. W. Stacey, Inc., [c. 1937]. 255 pages, illustrated. 4to. Cloth, $10.00.

CHILD LABOR AND THE NATION'S HEALTH. By S. Adolphus Knopf, M.D. Boston, The Christopher Publishing House. [c. 1937]. 32 pages, illustrated. 16mo. Paper, $.50.

INJECTION TREATMENT OF HERNIA. By Carl O. Rice, M.D. Philadelphia, F. A. Davis Company, [c. 1937]. 266 pages, illustrated. 8vo. Cloth, $4.50.

CLINICAL URINALYSIS AND ITS INTERPRETATION. By Robert A. Kilduffe, M.D. Philadelphia, F. A. Davis Company, [c. 1937]. 428 pages, illustrated. 8vo. Cloth, $4.00.

THE CITADEL. By A. J. Cronin. Boston, Little, Brown and Company, [c. 1937]. 401 pages. 8vo. Cloth, $2.50.

INTERNATIONAL CLINICS. A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles on Treatment, Medicine, Surgery, Neurology, etc. Volume III, Forty-Seventh Series, 1937. Edited by Louis Hamman, M.D. Philadelphia, J. B. Lippincott Company, [c. 1937]. 328 pages, illustrated. 8vo. Cloth, $3.00.